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# THE PACIFIC PHARMACIST

VOL. 1 JULY, 1907 No. 3

AN INDEPENDENT JOURNAL DEVOTED TO SCIENTIFIC PHARMACY AND THE INTERESTS OF THE DRUG TRADE

OFFICIAL ORGAN OF THE CALIFORNIA PHARMACEUTICAL SOCIETY

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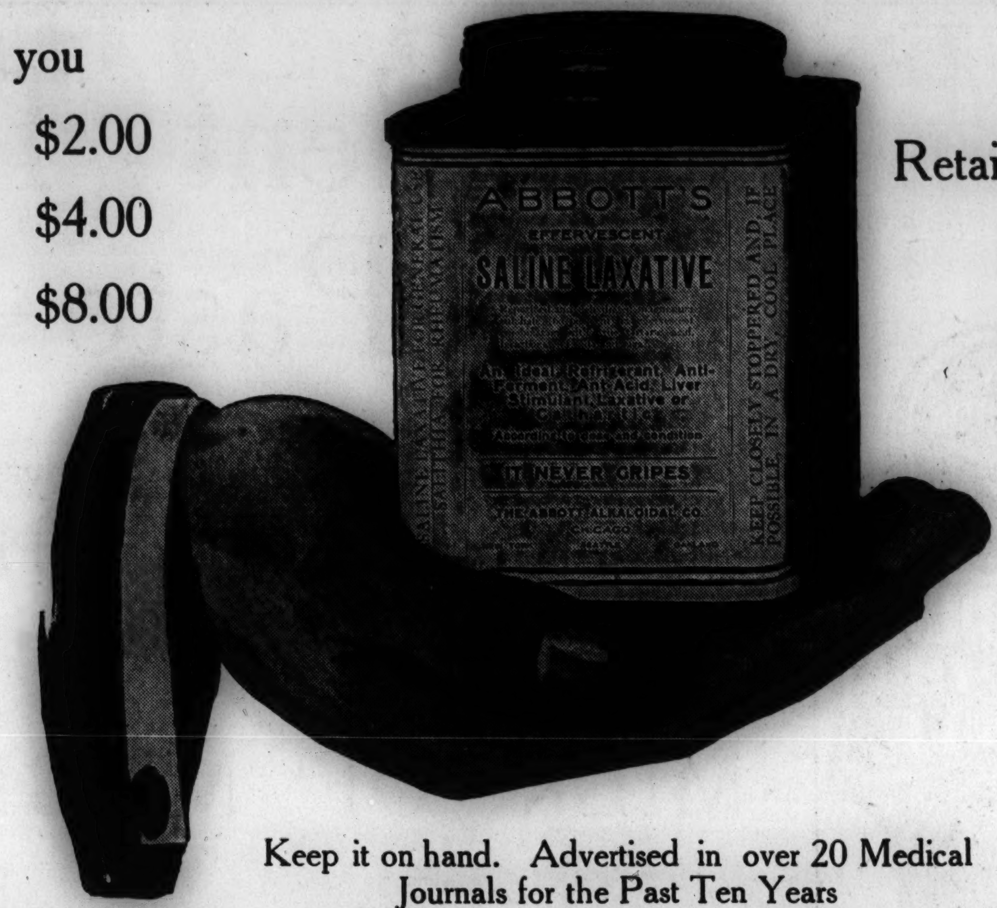
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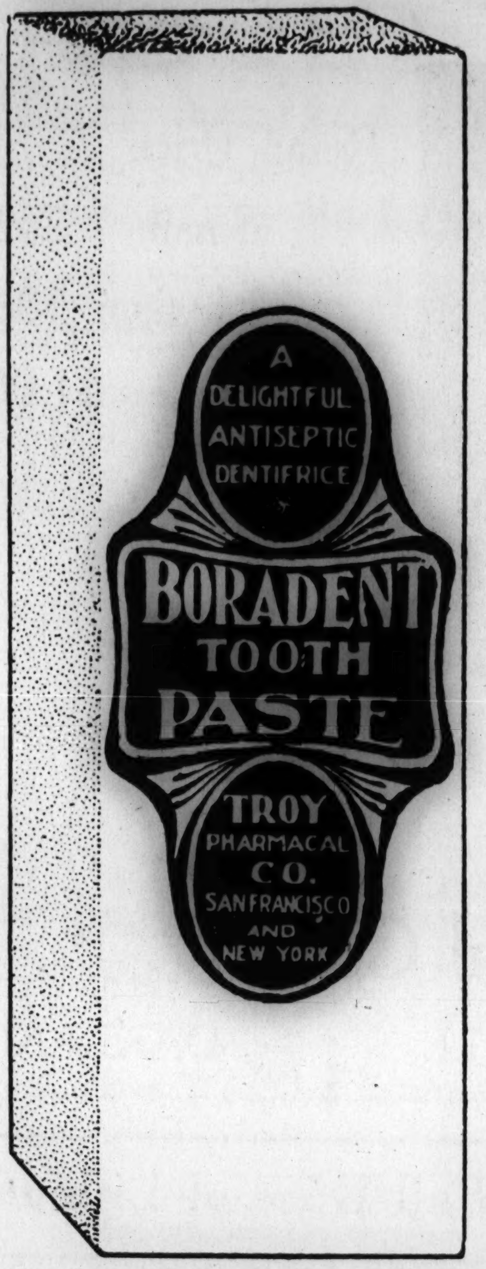
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# Pacific Pharmacist

**Official Organ of the California Pharmaceutical Society**

AN INDEPENDENT JOURNAL DEVOTED TO SCIENTIFIC PHARMACY AND THE INTERESTS OF THE DRUG TRADE

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## Editorial Notes

**California Pharmaceutical Society**

The California Pharmaceutical Society is alive! Yes, very much alive. Already about 120 members have been enrolled, and nearly the whole of Southern California to be heard from. Evidently the society is expected to fill a long-felt want, for everybody says, as soon as the subject is explained to him, "of course we need such a society. Why did we not have it before? Only a dollar a year! Then I want to join." And forthwith he fills in an application blank.

But when you come to think about it, isn't it strange that California, that belongs in the front row in matters of pharmaceutical education, that has had a fairly good pharmacy law sixteen years and been loyal to the N. A. R. D. from the first, should have been without a real live Pharmaceutical Association for fifteen years. If the pharmacists of this State have been able to do as well as they have without organization, what might not they have accomplished had they had the stimulus of a live organization, such as they had from 1876 to 1892?

As we think of the good times we had at our summer gatherings at Stockton, San Jose, Oakland, Sacramento and Los Angeles, and the sharpening of our wits that came about from the papers and discussions we heard there, as well as the real pleasure we had in the social features of those occasions, we actually felt sorry for ourselves that we have missed so much that we might have enjoyed.

Now let us all make up our minds that we won't do so any more. We have been shutting ourselves up in our own little sphere, narrowing the horizon of our interest to our own little store (or big one, maybe) interested in our brother druggist on the next corner, only just enough to see that he does not get ahead of us. We have tried selfishness too long; let us try a little "otherishness" as Drummond calls it, and see if life is not just as well worth living, and a good deal sweeter for the change.

**Reminiscencing** It is common to say that old men like to look back upon the past, but young men look forward to the future. The saying is true so far as it applies to men who are old in spirit, but the man of seventy-five whose heart is young looks forward to the future with all the buoyant expectancy of the man of twenty-five. Indeed, he is often even more sanguine in his expectations, for he sees what has been done, and looks for still larger things to come.

These thoughts are suggested by a short perusal of the history of the California Pharmaceutical Society, by Mr. James G. Steele, the first chapter of which appears in another part of this issue. We remember (now my young reader, don't say "I hate that word; you old fellows are always telling us what you **'remember.'** Give us something new!") We remember the feeling of discouragement that prevailed among the druggists of San Francisco when the meeting was held which preceded the first meeting referred to by Mr. Steele. It was called, not to form a pharmaceutical society or a college, or anything of that sort, but to take steps to **stop cutting.** One or two firms had inaugurated what we would regard as a mild form of aggressive cutting, and the small men—we were all small men then—were alarmed lest this practice should become epidemic and involve the whole city. We met, we talked, we argued, we threatened —but did nothing. On the way home from the meeting three or four crestfallen, almost disheartened young men, who had been trying to bring about peace, sorrowfully admitted their failure, and one of them remarked that they (the druggists) were all Ishmaelites, every man's hand was against his fellow, and nothing could be done until pleasanter relations existed among them. "Let us start a Pharmaceutical Society that will ignore trade antagonisms and seek to elevate pharmacy. In this way we may ultimately establish more friendly relations." This was agreed upon, and the first meeting mentioned by Mr. Steele was the result. The California Pharmaceutical Society was established, and in less than three years the society gave birth to the California College of Pharmacy. And all this came about through somebody advertising a dollar patent medicine for six bits!

**Who Was The Man?** In these days when we see an active Pharmaceutical Association in nearly every State in the Union and aggressive cutting in nearly every large city, it may seem strange that any one should ever have thought that the former would put a stop to the latter. Someone may ask "who was the impractical idealist that suggested the formation of a society for culture in place of coercion in trade?" It was either the late Professor John Calvert or the writer of this article—they were never able to decide which; but as John Calvert is no longer with us to assert his claim, we will concede it to him. In part his ideas were erroneous, in part they were correct. So far as they were erroneous they did no harm. So far as they were correct they did immense good. Cutting continues and probably will continue. The big fish will always try to gobble up the little fish. But while pharmaceutical education cannot prevent this, it can and does aid the financially weak to protect themselves from the financially strong in some departments of their business. Cutting is no worse because of pharmaceutical culture, while its effects are mitigated by the fact that brains always count for something, even in a contest with capital.

**Co-operation**

But culture is not the only object of a pharmaceutical association. It seeks to establish friendly relations, to promote harmony, to pave the way for co-operation in any measures that give promise of benefit to the body of pharmacists. This is not only an idealist's dream, but a positive necessity under existing economic conditions. It is impossible to see what may transpire from year to year affecting the drug trade, but it is certain that there are always parties anxious to subject us to injurious and vexatious legislation, to hold us up unjustly to public disfavor, or to impose needless restrictions upon our business. We have borne these things in silence because there was no organized body to speak. Druggists of California! Join the State Pharmaceutical Society and be prepared to stand up for your rights if these be assailed, and even take the aggressive if the policy of the last eight years be continued. Don't leave it to the other fellows. Take a hand yourselves.

**ANODYNES IN COUGH MIXTURES AND LINIMENTS**

Section 8 of the recently enacted poison law reads as follows: "The sale of morphine, codeine, heroin, opium and cocaine, their salts, compounds or preparations is hereby prohibited, unless upon the prescription of a physician, dentist, or veterinary surgeon, licensed to practice in this State, except preparations of opium containing less than two grains of opium to the fluid ounce."

When we were first shown a draft of this section before it had been presented to the Legislature, we stated that we were opposed to it in that form. We considered it too rigid and practically incapable of being carried out. We believe in living up to the law, but are opposed to sumptuous legislation. It is too easy to make and change the laws in this State. Laws are enacted without due consideration and often without a full knowledge of the difficulties attending their execution. For over fifty years we have been selling preparations of various kinds, such as cough mixtures, liniments, etc., which can not now be sold without violating the law, yet in all these years not a single person, so far as we know, has been injured in the slightest degree, or has acquired even the beginning of the drug habit from these sales.

**Total Prohibition or Control**

This section prohibits the sale in the State of California, without a physician's prescription, of Ayer's Cherry Pectoral, and many other harmless cough syrups, laudanum, compound chloroform liniment, opium liniment, and many other preparations of common use. It also prevents a druggist from putting up any old family liniments and from selling harmless cough syrups, if they happen to contain ever so small a quantity of opium, morphine, or their preparations. There ought to be a reasonable latitude in a law of this kind. We are as strongly opposed as anybody to the sale of medicines that contain narcotics or anodynes in sufficient quantity to lead, under any circumstances, to the formation of the drug habit, but most of these expectorant cough syrups will produce vomiting when taken in doses sufficient to narcotize. There is, therefore, no danger in such cases of inducing the drug habit, even if the medicine be taken to excess.

Where, then, is the line to be drawn? How can these preparations be sold without danger of creating a habit? We suggest that some limitation be put, either upon the proportion of any of these habit-forming drugs that may be put into any preparation or compound, or upon the total amount that may be contained in one package. This method of dealing with the difficulty is recognized in the law, for the last part of this section specially excepts "preparations of opium containing less than two grains of opium to the fluid ounce." We all know that this exception was made so as not to prevent the sale of paregoric. Now it has been our experience that the very preparation which the law permits the druggist to sell without the physician's prescription has led to the drug forming habit, and we have on several occasions refused to sell paregoric for that very reason. It does not seem that it should be necessary to entirely prohibit the sale of these remedies because once in a million times a misuse is made of one of them. If this practice were carried out universally, no ship chandler would be allowed to sell rope, lest some one should hang himself, and no gunsmith could sell firearms, lest somebody be shot. There must be a middle course somewhere. When our health boards found that some persons were selling milk that contained too many pathogenic germs, they did not prohibit the sale of milk, but made regulations limiting the number of germs to the cubic centimeter that might be present in milk that was sold. If our legislators and those who are so anxious to hamper the druggist in every detail of his business, would make an earnest effort to protect the health and lives of the people without unnecessarily abridging their liberties, a law could easily be enacted that would accomplish this object. As the matter stands now, the law will, almost of necessity, be so frequently violated in this particular as to be in danger of being brought into contempt. We shall be sorry if this result should come, but, to avoid such a condition in future, let us see that only reasonable laws are enacted, and then see that they are enforced.

### THE LATEST WONDERS

For over a hundred years we have been ridiculing the alchemists because of their deluded notion that they could transmute what they called the baser metals into gold, and because they also thought that it was possible to find the elixir of life, the use of which would prolong life indefinitely; and now comes Sir William Ramsay, a very respectable authority, who claims that he can produce copper out of a mixture of sodium, lithium, and potassium by the aid of those mysterious little agents that emanate from radium.

### Artificial Copper

There have always been philosophers who have leaned to the idea that there was only one kind of matter, and now men of high standing as scientists are adding the weight of their great intellects to this idea. We used to think that we knew something, and were happy in the impression that when we had got down to atoms we had found the beginning of things, but now the poor atom has had its nose put out of joint by the birth of the ion. We understand that the Boston girl graduate who "loved a molecule and adored an atom," has already transferred her affections to the ion, "because, you know," she says, "it tells us so many secrets."

These new wonders of physico-chemistry make us touch our hats to the alchemists who, in seeking for the philosophers' stone and the elixir of life, found chemistry. But these wonders in the world of inanimate matter are equalled in the realm of vital agencies, if we are to believe what is told us by the bacteriologists. Pasteur began by opening his Pandora box, and soon there was revealed to us a vista of possibilities in micro-organisms. He was quickly joined by a host of observers and experimenters, until we are told that the festive microbes disport themselves in countless numbers in the food we eat, the water we drink, and the air we breathe. They are absolutely omnipresent: we cannot get away from them. A few of these little sprites are harmless enough, but when they are present in large numbers they are highly injurious, and the wonder is, as we read what the microscopists say, that one of us is left alive to tell the tale. We often hear people descant upon the power of numbers to effect certain changes, but in the case of these germs we have an extreme illustration of what the term means. Milk always contains more or less bacteria. If it contains more than thirty-five thousand to the cubic centimeter it is condemned, but milk that contains only thirty-four thousand nine hundred and nintey-nine in a cubic centimeter may be drunk and nobody be hurt. That number is not sufficient to produce disease in a healthy person. What is there in the human alimentary canal to keep these creatures from doing harm? Probably the opsonic theory may help to explain.

**Microbes Everywhere**

**Opsonins**

This brings us to the latest wonder. Some physicians or biologists claim to have discovered germs in the blood, so that after their action disease germs are digested by the white blood corpuscles and, being thus destroyed of their power to create disease, the sickness is killed. These opsonins are subject to culture like bacteria, and are injected into the body. All that the doctor has to do now is to find the right kind of an opsonin, make a culture of it, and inject it into the patient, and let these microbes and the typhoid fever microbes fight it out, while he simply sits by and bides his time to make another injection. This does away with all need of drugs and medicines, and gives happy promise of doing away with ninety-nine per cent of the doctors.

In the light of these discoveries we cannot any longer afford to laugh at the alchemists. We are surely in a way to discover the elixir of life. The microbes that produce many diseases are already known, and soon we will have the various opsonins with which to combat them. Other microbes will doubtless be found and disposed of in the same way. There will still remain, however, one more microbe to be discovered, that is the "old age" bacillus. As soon as this has been found, somebody will doubtless find the opsonin that will prepare him for digestion by the white blood corpuscles, who will forthwith eat him up, and "death, the last enemy, shall be destroyed."

As we think of these recent discoveries and of what the future may open up to us, we almost wish, either that we could live forever, or that we had not been born until A. D. 2000. We would even welcome reincarnation, that we might see with our eyes, and hear with our ears, the wonderful things that will be revealed to our posterity. In comparison with what will be known a hundred years hence concerning the things which are now mysteries, our present knowledge is so limited that we feel inclined to cry out in humiliation, "Ignoramus! ignoramus! ignoramus!"

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## CALIFORNIA PHARMACEUTICAL SOCIETY

The California Pharmaceutical Society is getting ready to do some good work in the near future. The trustees' meeting held in May was attended by the entire board and was a very enthusiastic meeting from beginning to end. Besides discussing subjects of importance, a committee was appointed to devise means for soliciting membership into the society. The City of San Francisco was mapped off into sections, and a representative in each section has been asked to personally interview his neighbor druggists with the view of getting new members.

Secretary F. W. Nish was instructed to send application blanks to one or more members in every city in the State and ask them to serve as a local committee in securing members from among the druggists of their respective cities.

We know that every druggist is "very busy," but let each of us do our mite and in the end the aggregate of the results will surprise the most sanguine.

**Meeting of the Board of Trustees**

The Board of Trustees met on June 27th, and among other business, elected the following persons to membership:

J. H. Guedet, 1501 Waller St.; D. D. Hunt, 1800 Haight St.; D. H. Wulzen, Seventeenth and Castro Sts., San Francisco. H. A. Glines, Seventh and Center Sts.; O. J. Levy, 460 Seventh St.; Albert Forneris, 102 Telegraph Ave.; Warren P. Wheeler, 460 Seventh St.; Paul N. Hanby, 1766 Seventh St., Oakland. J. P. Bowman, Crescent City, Cal. Frederick Webley, M. D., Santa Rosa, Cal. James G. Steele, 130 Laguna St., San Francisco.

The Board unanimously voted to make the **Pacific Pharmacist** the official organ of the Society.

The question of holding a semi-annual meeting this year was discussed, and after a full consideration it was decided to hold only the annual meeting in November in San Francisco. In the meantime, the committees appointed to secure new members will apply themselves to this duty, and it is expected that the fiscal year will not close until fully three hundred members have been secured. Mr. I. Tobriner reported that in visiting his brother druggists in Oakland, he had not met with one refusal, and he expects to have practically the entire retail drug trade of his city enrolled before November. More than half of them are already members. In fact, when druggists are properly approached and the evident need of such an organization shown, scarcely any pharmacist of good standing wants to be outside of the organization.

## Decisions Under the Pure Food and Drugs Law

The Federal Pure Food and Drugs Law provides that where there is doubt as to the interpretation to be put upon any provision of the law, it may be referred to the Secretary of Agriculture whose decisions, while they do not become a part of the law, yet express the attitude of the department in relation thereto. See F. I. D. No. 44. And as these decisions are given after consultation with the Attorney-General, it is fair to assume that they will be the law until a contrary decision has been obtained in the Supreme Court of the United States.

We propose to publish such of these decisions (F. I. D.—Food Inspection Decisions) as relate to the drug business, and print in this issue numbers 40, 41, 43, 44 and 46. In some cases, where the decision relates partly to foods and partly to drugs, we omit such portions as have no interest to the drug trade. F. I. D. 1 to 39 relate to foods only, and hence the first we publish is No. 40.

## Official Antidotes

We publish in another column the "Official Antidotes" adopted by the California State Board of Pharmacy, as required by the new Pharmacy Law. We suggest that proprietors of stores should send to the State Board of Pharmacy, No. 925 Golden Gate Avenue, San Francisco, for two copies of this document, and cut them up so as to paste them in a convenient place where they can be seen in a moment. If wanted at all, the information here given will be needed in a hurry. So have it handy.

In a future issue we will reprint the "Circular of Information" issued by the State Board. We are frequently asked questions which are answered in this circular.

## TAKE TIME

If you are not perfectly familiar with the way vaccine and antitoxins are made and of their action in the prevention and cure of smallpox, diphtheria, anthrax, etc., take time to read the very lucid and interesting account which we publish in this issue of the methods pursued in the Cutter Analytic laboratory at Berkeley. It is rather a long story, but it tells not only how these wonder-working agents are made, but also how they act so as to prevent or cure with practically no danger to the patient. It will pay you well to read it.

## SAN FRANCISCO GOING RIGHT AHEAD REGARDLESS OF KNOCKERS

During the month of June the bank clearings for San Francisco were $177,307,227.96, an increase of $28,394,432.02 over the bank clearings for the month of June, 1905, and $45,159,796.50 over the bank clearings of June, 1906.

Permits for buildings amounting to $3,916,450 were issued during the month of June.

## DONATION

The library of the California College of Pharmacy has recently received the following publications from the Wellcome Chemical Research Laboratories, London, of which Dr. Frederick B. Power, formerly of the University of Wisconsin, has for many years been director:

1. Chemical and Physiological Examination of the Fruit of Chailletia Toxicaria, Don, by F. B. Power, Ph. D., and Frank Tutin.

2. Chemical Examination of Eriodictyon, by the same authors.

3. The Botanical Characters of Some California Species of Grindelia, by P. E. F. Perrédès, B. Sc., F. L. S.

4. The relation between Natural and Synthetical Glycerylphosphoric Acids, (Part ii), by F. Tutin and A. C. O. Harn.

5. The Constitution of Umbellulone (Part ii), by F. Tutin.

6. The Constitution of Chaulmoogric and Hydnocarpic Acids, by M. Barrowcliff, A. I. C., and F. B. Power.

7. The Reduction of Hydroxylaminodihydroumbelluloneoxime, by F. Tutin.

We think it's about time that thing was reduced. Now our good friend Dr. Power is one of the kindliest gentlemen that nature ever made; so when he throws at us, or lets those collaborators of his do it, words of fifteen and sixteen syllables that take from thirty to forty letters to spell, we know he means no harm, but we cry out in alarm just the same. We never get into a controversy with anacondas and sea-serpents. Frank Tutin, the author, tells us that "when umbellulone is treated with an excess of hydroxylamine in alcoholic solution

**HYDROXYLAMINODIHYDRO-UMBELLULONEOXIME**

is formed." We don't doubt your word a bit, Mr. Tutin. It's too big. We are glad you have been able to reduce it. Keep on reducing, and when you have got it down to three or four syllables, let us know.

## OPSONINS

**The Opsonic Theory** is just now the great subject of comment among physicians everywhere. It seems that there are "opsonins" in the blood which, acting as sauces or relishes, prepare disease germs for digestion by the leucocytes or white blood corpuscles, thus destroying the capacity of these germs to provoke disease. It follows that if the amount of opsonins be increased, the resistance of the body to disease will be enhanced in like measure. This increase of opsonic power has been effected by indirection; sterilized cultures of the germs themselves (called "bacterial vaccines") are injected in small amounts at first, and then in larger quantities, until the body, following the well-known physiological law of supply and demand, develops an increasing resistance. In other words, the supply of opsonins is augmented, with the result that a much larger quantity of disease germs in the blood can be digested, consumed, and put out of harm's way. This, in a word, is an outline of the opsonic treatment, regarding which much is expected by the medical profession in the cure of various diseases.

## THE BITER BITTEN.

Two physicians who conduct a drug store in a West Virginia town recently informed the Board of Pharmacy that one of their competitors was conducting a store without a license. An immediate investigation followed, and the charge was found to be correct and the shopkeeper was arrested. Unfortunately for the complaining physicians the investigation did not end with the one store, but extended to all others of the town. As a result the two informers were also arrested on a charge similar to the one they had preferred against their neighbor, they having failed to qualify as pharmacists according to the law before becoming too ardent in suppressing illegal proceedings.

While the officials were in the town they also called upon another physician who was apprehended on a charge of failing to attach his full name to his prescriptions as required by law.

## STAND BY THE N. A. R. D.

### By W. B. Cheatham.

In the N. A. R. D. you have the greatest of retail organizations, and through it you can work for betterment to the greatest advantage; but remember, that the mighty mogul engine cannot draw a train, indeed it cannot turn a wheel without fuel and water and some oil on the bearings; neither can the N. A. R. D. turn its wheels and draw the load put upon it by your needs unless you supply the financial fuel, water and oil.

There never is a wind that blows through an orchard of fruit that fails to separate some rotten specimens from the limb upon which they hung as useless burdens, and assisted to mellow and perfect the fruit remaining; and it can be expected that a few specimens of decayed fruit that have hung for a time on the N. A. R. D. tree will find their way to the ground because one court out of twenty odd has rendered a decision **seemingly** adverse to our interests. But to the glory and good of the retail drug trade, let it be known that the profession embraces a sufficient number of men who have the stamina and determination to stand up for its rights, and they are the people who do not have to be conscripted to get them to go to the front and battle under General N. A. R. D., the only general the trade ever had who would watch the field with care and never retreat except to strengthen his position and protect his men, and a field-glass is not needed to enable one who can think, to see that, despite all the reverses experienced during the past eight years the N. A. R. D. army has advanced to a position from which it cannot be dislodged, with the ranks practically unbroken; and the appeal it makes is, **let every man do his duty.** If you have not paid your dues, you are in debt. Cancel the debt, so the association may have funds to work with. Do not wait for it to spend the amount of the dues in sending some one to collect them. Treat the matter as you would any other business proposition. It's your association. It is your betterment it is battling for.

A receipt will be promptly sent you on receipt of your remittance to the office, 98 Sanchez Street, San Francisco, or to Chicago.

## SALES OF WOOD ALCOHOL

We have been asked to state under what conditions wood alcohol may be sold. Reading the law carefully, we find many conditions, which are as follows:

1st. Sales need not be registered.

2d. The purchaser must not be under 18 years of age.

3d. He must be known to be aware of its poisonous character.

4th. It mnst satisfactorily appear that it is to be used for a legitimate purpose.

5th. It must be labeled "Wood Alcohol."

6th. The label must either be in red ink on white paper, or white on red paper. It must bear the word **"Poison,"** the vignette representing the skull and cross bones, and the name and address of the seller. The label must also bear the following antidote: "Give warm water and salt (two teaspoonfuls to a tumbler), immediately; repeat at short intervals. Stimulate respiratory movement. Give strong coffee."

We wonder how many paint stores live up to all of these requirements. We suggest that pharmacists observe them closely, and if they do, and other merchants do not, it will result in the business falling into the hands of those who observe the law.

### 50,000 Pounds of Cyanide Sold by One Druggist.

Mr. Jacob Jessen, of Ontario, this State, has secured the contract for furnishing the San Bernardino County Horticultural Commission with 50,000 pounds of cyanide of potassium at 24¾ cents a pound, and 1,600 pounds of sulphuric acid at 2¼ cents a pound. That's a big lot of poison, for sure, for the efficient, active, and energetic Commission proposes, not only to slay every kind and sort of pernicious scale bug in the county, but proposes to slay them as fast as they dare to cross the west border line of the county.

# MANUFACTURE OF ANTITOXINS AND VACCINE.

### As Conducted in the Cutter Analytical Laboratory at Berkeley, Cal.

Antitoxins are practically new agents for the cure of germ diseases. They were unknown before 1890 when Behring, a German, and Kitasato, a Japanese bacteriologist, worked out their production. Since then several German and French bacteriologists enlarged upon the work of these pioneers, and about five years later, after an immense amount of laboratory experimentation, a few antitoxins were perfected, the most important of which is diphtheria antitoxin. And for the past few years American and European laboratories, following the methods of these workers, have been able to produce diphtheria antitoxin in its highest potency. The method of production is simple, yet requires the most careful attention to details.

To make diphtheria antitoxin it is first necessary to secure a pure culture of the diphtheria bacilli. Such culture may be made from the throat of a person sick with diphtheria or may be obtained from some American or foreign laboratory making antitoxin. The next step is to produce diphtheria toxin, which is performed by growing the germ on the surface of previously prepared beef tea or bouillon in suitable flasks. This bouillon is quite like that made at home or served in restaurants. A small quantity of the germs is deposited on the surface of the bouillon and then the flasks are put in an incubator and kept uniformly at the temperature of the human body. In a day or two the entire surface is covered by the multiplied growth of the germs, and by the end of a week it has become a thick, heavy, white, tenacious membrane-like growth. This surface growth is exactly like the white patches or membrane in the throat of a person sick with diphtheria. Or, in other words, we have a case of true diphtheria in each flask. The germs while growing on the surface of the bouillon take it in as food and secrete products that are poisonous. The bouillon becomes more or less saturated with these poisons, and it then constitutes the so-called diphtheria toxin. An exactly similar process takes place in the throat of a person sick with diphtheria. The germ multiplies, produces whitish patches or membrane on the surfaces of the throat, produces a toxin or poison which is absorbed and poisons the system, giving rise to all the symptoms of the disease. The laboratory toxin after having been made is used to inject into horses to produce the antitoxin. The production of antitoxin is a slow and laborious one, and requires from three to four months' time.

The method is to inject under the skin of horses increasing quantities of toxin, beginning with a small quantity, about five or ten drops. After two or three days a larger quantity is injected, about twenty drops, then with periods of a few days between each injection increasing quantities are given until at the end of three or four months as much as a pint of toxin can be injected at a time. The first injections cause some disturbance or sickness in the horse, but the later ones develop a tolerance and the horse is able to stand the larger quantities without inconvenience. The horse is then said to be "immunized." For about three or four months such a horse will produce potent serum; then he ceases to produce and must be discarded. The toxin used for the injections is so poisonous that one drop would kill twenty-five guinea pigs, each weighing half a pound. A horse (fig. 1) injected with a pint of such toxin receives enough poison to kill 250,000 guinea pigs, or this same amount would kill about 1000 men. This tolerance or immunity, as it is called, is due to the fact that the toxin stimulates certain cells or groups of cells or organs of the horse to produce some substance which renders inert or neutralizes the poison or toxin, thus protecting the life of the horse. This substance is antitoxin. (The name implies its action, anti—against, toxin—poison.) This substance or antitoxin is produced in greater and greater amount as the injections of the toxin are increased, and at the end of three or four months when the horse has gained a tolerance for the enormously large quantities of toxin, it is found in great abundance in the horse's blood. To make this plainer a comparison might be made with that tolerance which obtains in the person addicted to drug poisons. The opium, morphine, or cocaine fiend, or the boy smoking his first cigar, is made very sick or stupefied when the habit is first started, but after several indulgences is able to withstand the poison without much inconvenience, and in time is able to indulge freely. It is probable that the same process is at work in such cases as in the horse when diphtheria toxin is injected. Nature comes to the rescue to save life by producing some protective substance that neutralizes the poison, and so the dope-fiend is able to tolerate great poisonous doses.

To obtain the antitoxin from an immunized horse it is bled about a week after the last injection of toxin. The bleeding of the horse is a very simple process, causing but little pain and is not often objected to by the animal. The operation is performed by inserting a trocar, or sharp pointed rod having a canula or tube around it, through the skin and muscles of the neck into the jugular vein. When the vein has been entered the rod is withdrawn, leaving the tube in the vein. A sterile rubber tube is quickly connected, which is in connection with a glass tube passing through a cotton plug in the mouth of a blood tube or flask. The blood then flows freely from the vein into the receiving flask or blood tube. Usually about a dozen (fig. 2) blood tubes are filled from the horse at a single bleeding. This seemingly large amount of blood does not affect the horse in any way, but instead the horse appears to be livelier and more active than before. The blood tubes are placed in storage and after three or four days it will be found that the blood has clotted and separated into two portions. The clot containing the red and white corpuscles has settled toward the bottom of the tube leaving the clear yellow serum or fluid in the upper part. This clear yellow portion is the antitoxin. From this, it is readily understood that antitoxin is the fluid portion of horses' blood containing the protective or neutralizing substance produced in it by the horse during the time of treatment with toxin. The antitoxin or serum is siphoned from the blood tube into a storage bottle, four-tenths of one per cent of trikresol is added as a preservative, and it is then filtered.

All the operations in antitoxin production are under the most rigid aseptic conditions to prevent any accidental contamination. All instruments, bottles, containers, etc., have been previously sterilized, and the antitoxin from the horse to the patient comes in contact with only sterile surfaces and germ-free filtered air. And lastly it is tested by the usual bacteriologic methods to insure its freedom from any contamination during process of production. It is then measured into the syringe containers and is ready for the market.

The strength of antitoxin is estimated by the number of units it may contain. A unit is a variable quantity and may be as much as one-tenth or as little as one-fiftieth of a drop. It is that quantity which will save the life of a half-pound guinea pig (fig. 3) when injected with 100 fatal doses of toxin. Or it is the amount that will save 100 guinea pigs against one fatal dose of toxin. Then one drop of a high grade antitoxin would save from death 3000 or more guinea pigs each receiving one fatal dose of toxin.

At the present time the antitoxin unit is the same for all antitoxins whether produced in American or European laboratories. All foreign antitoxins are compared or standardized by the German or Ehrlich unit, made at Frankfort, Germany, while the American antitoxins are standardized by the Government unit, made at the Hygienic Laboratory of the Public Health and Marine Hospital Service at Washington. This standard unit compares exactly with the German unit. It is sent by the government to each of the American laboratories every two months, and each laboratory standardizes or estimates the strength of the antitoxin they produce by it (fig. 5). From this it is seen that all antitoxins are comparable and definite in strength; there can be no sophistication or dishonest product. Not only does the government require a standard or definite strength of all antitoxins, but it also requires that they be made under the most rigid hygienic conditions and surroundings. Each American laboratory is inspected by a competent inspector who demands that every minute detail shall meet with the government requirements. Also that the laboratory itself shall be beyond question as to its surroundings and equipment. Furthermore, the products of each laboratory are purchased in open market by a government agent, these are sent to Washington and then tested for their strength or value and other required qualifications, and if found below the standard in any way the license of such laboratory is recalled and it must cease business. Antitoxin and other biologic products are the only remedial agents that are under strict government control, and for this reason they merit the confidence of the physician, the pharmacist, and public. Antitoxins represent the highest achievement in scientific medicine and are the result of years of labor and the delving into the secrets of nature, and applying these secrets to the cure of disease. So in the use of diphtheria antitoxin it is but the application of a substance that nature has used for the cure of diphtheria and has held in secret for remote ages or since the first case of this disease. Or in other words, the injecting of antitoxin in diphtheria is but the borrowing of a protective substance from the horse, which nature has produced, and handing it over to the person sick with diphtheria to protect his life. The antitoxin is produced in the horse by nature to protect its life against the increasing injections of diphtheria toxin (immunizing process) and when such antitoxin is injected into the body of a person sick with diphtheria it does for such person the same duty, that is, it protects life by neutralizing the increasing amount of toxin produced by the diphtheria germ growing in the throat. Such increasing amounts of toxin are absorbed by the body of the patient and poison it so much that death results unless neutralized and rendered inert. In every case of diphtheria the body of the patient is continually producing its own antitoxin which is nature's effort to cure the disease, and if the amount of antitoxin so produced is sufficient to neutralize all the toxin produced by the diphtheria germs growing in the throat, such person gets well. If it is deficient the patient dies. But science comes to the rescue and borrows the deficient amount from the horse and gives it to the patient that he may live. Wonderful are the ways of nature to care for her own, and more wonderful are her secrets when science learns to apply them. There are at the present time many erroneous beliefs and much prejudice concerning the use of diphtheria antitoxin. It is believed by many that it causes serious complications or after effects, that it causes rheumatism, that it brings on paralysis or heart failure, makes children cross-eyed, produces scrofula, etc. None of these beliefs are founded on facts or substantiated by statistics. There is a prejudice that antitoxin is harmful because it is a poison. It isn't such, for it is the same substance as the liquid portion of all blood whether of animals or man. Antitoxin is placed on the market by nearly all the American laboratories in four different size packages, containing respectively 1000, 2000, 3000, and 4000 units. The smaller two are called the immunizing size, and the 3000 and 4000 units are the curative size. The immunizing size is understood to be the quantity necessary to protect a person who has been exposed to a case of diphtheria, that is, if a case of diphtheria develops in a family of several persons they have all been exposed to the disease, and by being injected with 1000 or 2000 units of antitoxin they are protected from taking the disease. This protection lasts from two to six weeks, which is sufficient time for the case that has developed in the home to be cured and methods taken to disinfect and eliminate the disease. This prophylactic use of the antitoxin, as it is termed, then allows members of the family to attend the patient without fear of taking the disease, and also eliminates the stringent quarantine of the house as was practiced some years ago. The curative dose of 3000 or 4000 units is used in true cases of diphtheria. A young child may be cured by 3000 units, if the antitoxin is injected very early in the disease; for older patients the 4000 should be used. Each individual case is treated according to the severity of the disease, and the attending physician uses his judgment from experience as to the necessary amount that should be used for a cure. All cases are not alike as some are more resistant to the effect of the antitoxin than others. Age is an important factor and older persons require more than young children. Also the habits of the person, his or her condition of health previous to the attack, have an influence on the outcome. No two cases can be compared. A robust man may require more than a frail woman, but sometimes the reverse is the case. The important point in antitoxin treatment is that the patient receive enough of it, enough to neutralize all of the toxin in the system and enough more to take care of the toxin that is subsequently formed and absorbed. There is no such thing as over-treatment with antitoxin, no over-dose, as it is harmless and there are no serious after effects. It should be used until the symptoms abate to a point of absolute safety, till the false membranes and patches in the throat disappear. To more clearly bring out the above statements and to illustrate what antitoxin will do, its

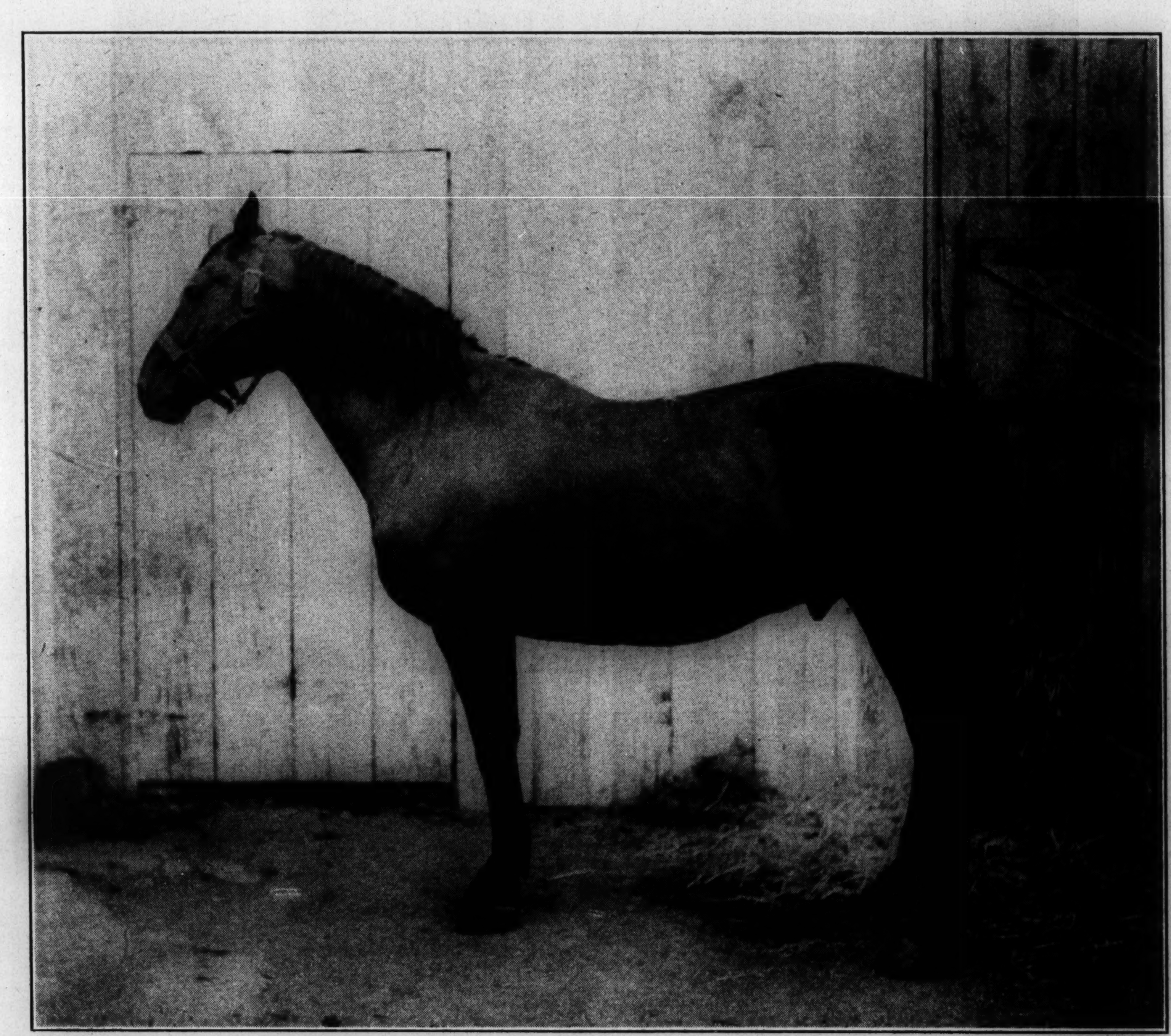

Fig. 1.

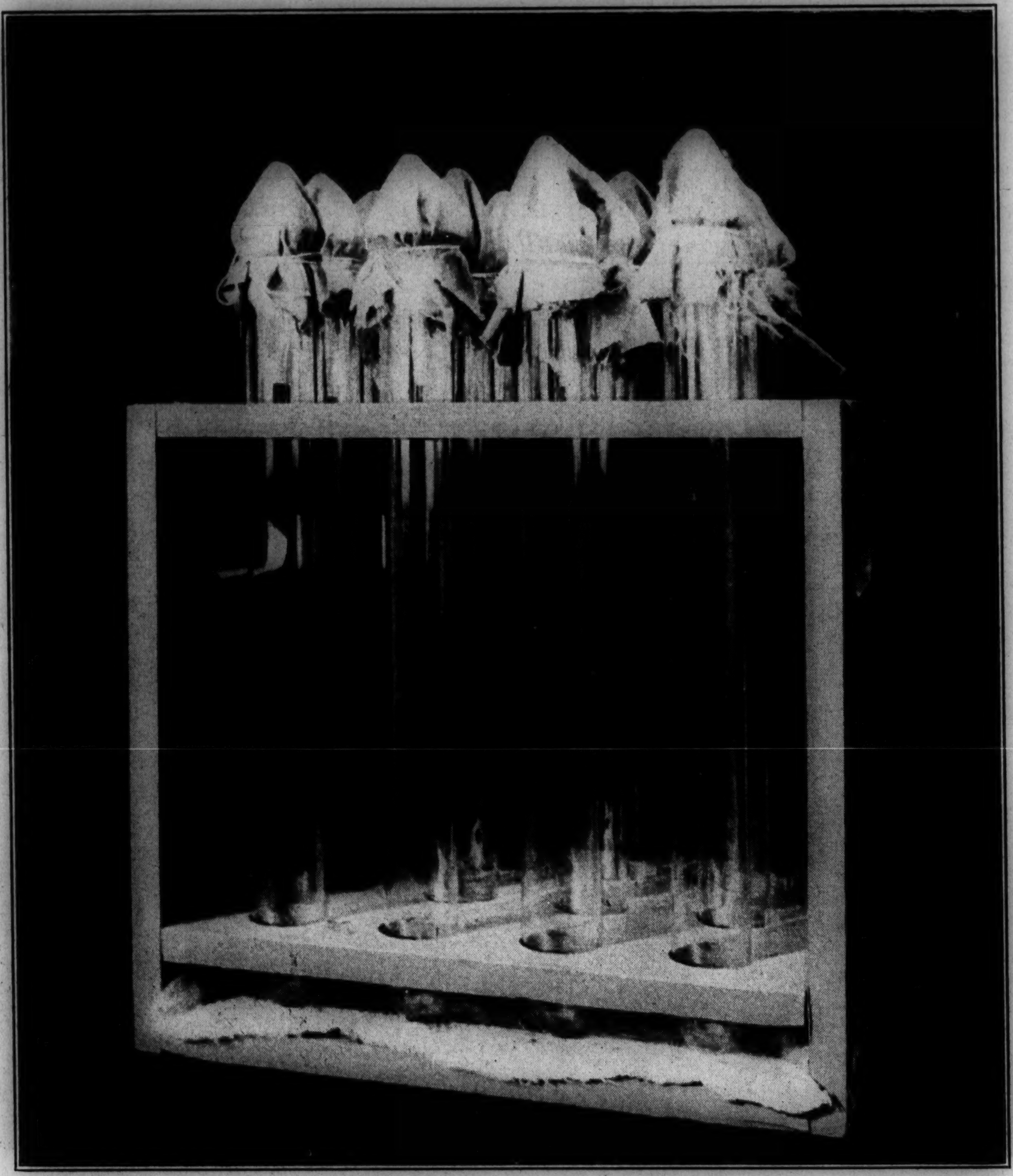

Fig. 2.

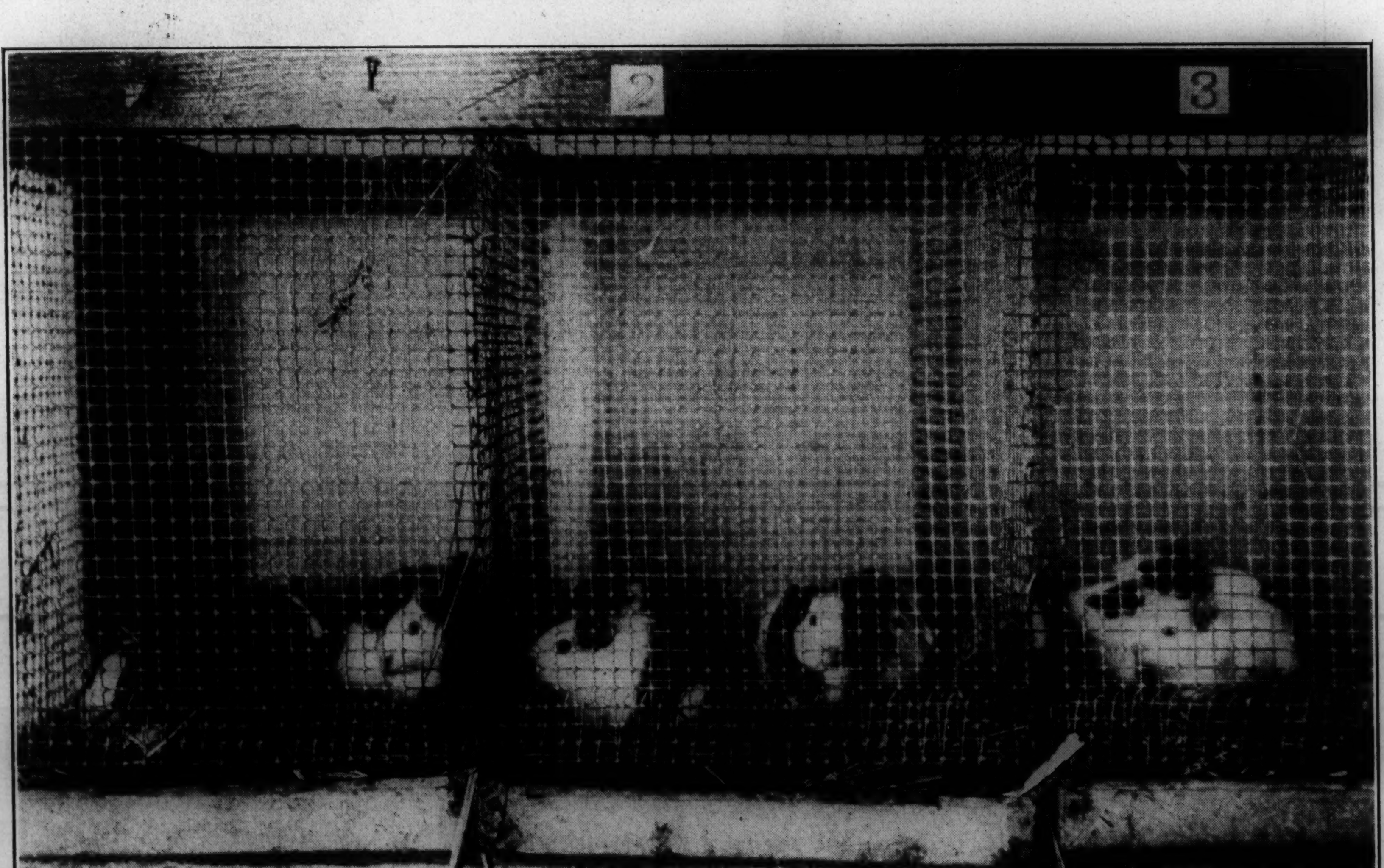

Fig. 3.

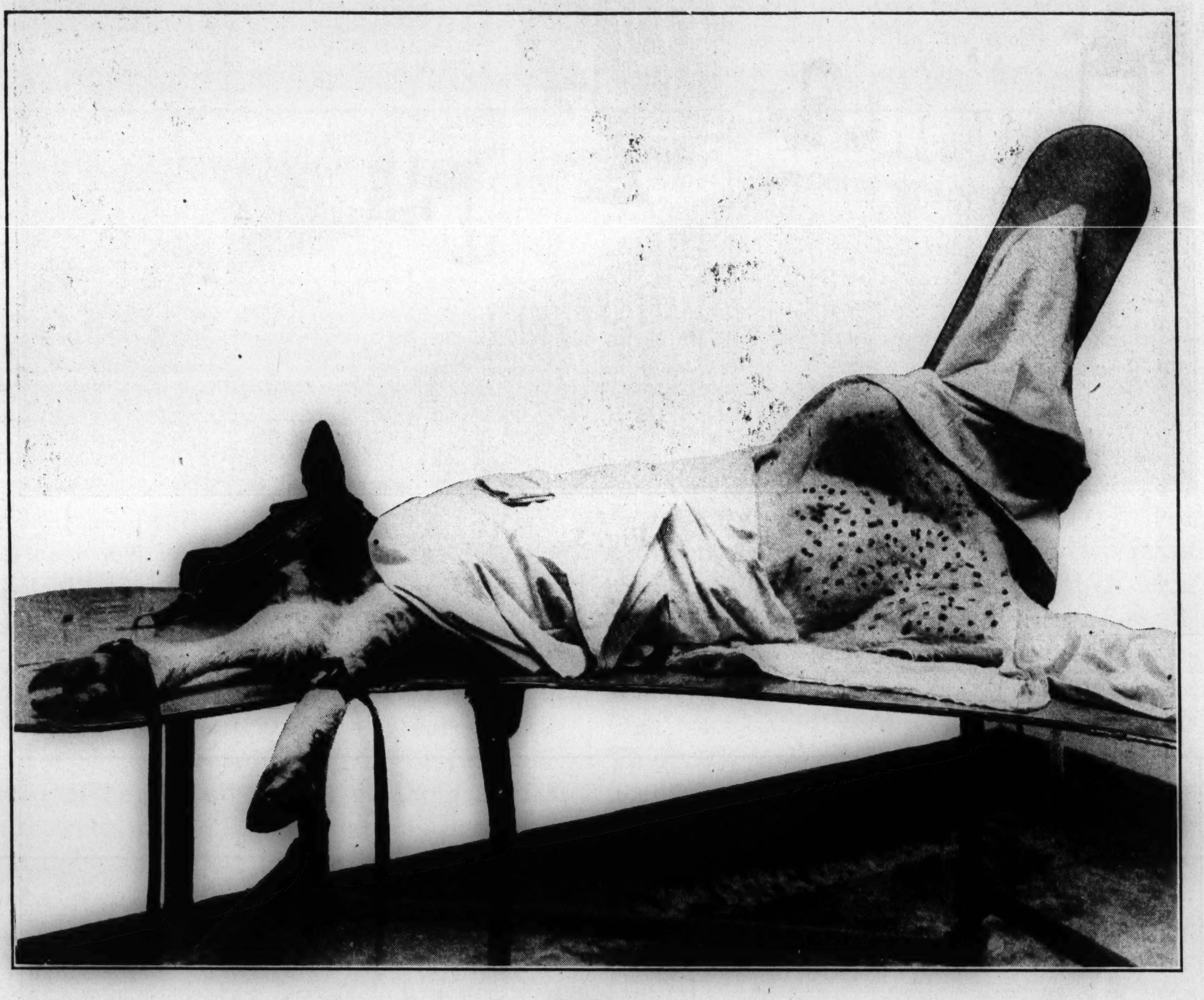

Fig. 4.

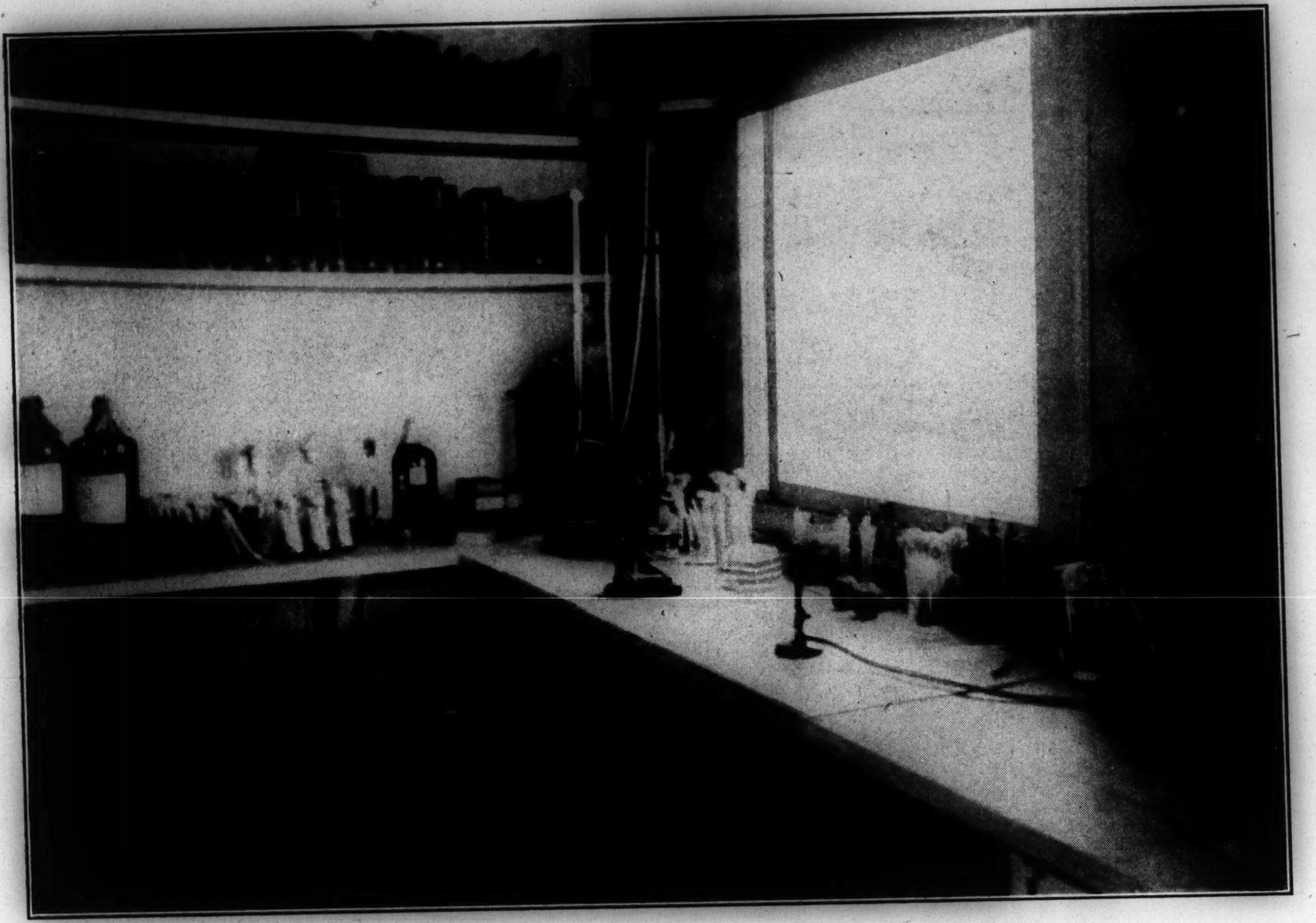

Fig. 5.

Grounds and Buildings of the Cutter Laboratory.

harmlessness, etc., a case may be cited that was treated in the Alameda County Hospital, the details of which were given by the house physician. A young girl in the last stages of diphtheria was brought to the hospital. She was unconscious and gave all the indications of a fatal ending in a short time. The physicians said she could not live more than twelve hours, but believing there was hope as long as there was life, and also to learn what antitoxin would do in such a severe case, they began injecting diphtheria antitoxin, using for the first dose about 32,000 units. In six or eight hours later, upon noting a slight improvement, a second injection was given, using this time about 24,000 units. A third injection of about the same amount was made some hours later, and during the next day more was given, and by the end of 48 hours the girl was on the road to recovery. On the third day she talked and joked with the nurse and asked for something to eat. In a week or more she was a well girl and was taken home. The total amount of antitoxin used in this case was nearly 160,000 units, or forty curative doses. There were no after effects or harm done by the use of this very great and unusual amount of antitoxin.

A case was reported in one of the Eastern medical journals some time ago that exceeds this in the amount of antitoxin used. In this one the disease was rather resistant to the antitoxin as it lasted over a period of two weeks before it was finally cured. Antitoxin was injected two or three times every 24 hours and a total of about 285,000 units were used. From what has been said it will be seen that in every case of diphtheria it is only a question of the use of the necessary amount of antitoxin.

Of course, there are numerous cases where antitoxin is used and a cure is not effected, but they are the exception. In some of them it may be that the antitoxin was used too late in the disease or perhaps not enough of it used.

The laboratory produces other biologic products besides antitoxin, among these are antistreptococcic serum, vaccine virus, anthrax vaccine, blackleg vaccine, tuberculin, and mallein. The latter four are for veterinary use.

A few words might be said about vaccine virus, as it is a well known biologic product, but one against which there is much prejudice and misunderstanding. The prejudice is due mostly to facts brought to light in times past when its production and application was less scientific than at present. All vaccine virus at the present time is made under the most rigid aseptic conditions and by approved scientific methods. It is constantly under government inspection and must meet all the requirements for purity and freedom from any objectionable feature. Young calves are used, only, in its production at the present time. These animals have been selected for the reason of their freedom from any disease, and for the ease in handling them.

A calf from five to ten months old is most suitable one. The animal is carefully selected and when brought to the vaccine department is thoroughly inspected and then it is further tested for any disease of body or skin. This testing requires several days. If found perfectly sound and healthy it is thoroughly washed from head to heels with hot water, soap, and brush, that is, it is given a thorough shampoo. It is then strapped on to the operating table and that portion of its body in the region of the udder and inner hind legs is again shampooed, then carefully shaved, leaving a smooth, bare surface. This surface is then thoroughly washed with soap and boiled water and scrubbed with a brush. It is rinsed off first with boiled water, then with cold sterile water, and dried with a sterile towel. The surface thus obtained is as sterile as it can be made. This surface is then vaccinated with glycerinated vaccine. This is done by making small, short needle scratches or linear incisions over the entire surface and then rubbing the vaccine into them. This operation is done quickly and with little or no pain to the animal. The animal is then placed in the incubating room for six or seven days and carefully attended. At the end of this time the calf is again placed on the operating table, and upon examination it is found that every one of the little scratches or lines have become a vaccine vesicle. That is, where a scratch or line is made there is a raised, blister-like (fig. 4) vesicle, whitish in color, and filled with a soft granular pulp. It is not sore-like, as in the vaccinated arm, neither does it contain any pus. The entire vaccinated area is then carefully washed with very warm water and soap and carefully scrubbed with a brush. It is rinsed with boiled sterile water and dried with a sterile towel. The vesicles are removed by a scraping or cutting process, with a curette, or sharp-edged spoon-like instrument. The pulp thus collected is weighed and mixed with six times its weight of sterile 50 per cent glycerine and then it is ground to a cream-like mixture, which constitutes the glycerinated vaccine of the market. The vaccine at this point is not ready for the market, for upon a bacteriologic examination it is found that there are a few bacteria present. These are the deep-skin bacteria of the animal, which cannot be eliminated by the washing, etc. These bacteria are of a perfectly harmless variety, but are removed from the vaccine before it goes on the market. This is simply done by allowing the gylcerinated vaccine to stand from three to five weeks, with occasional shaking, during which time the glycerine kills off all the bacteria, but does not affect the vaccine bodies. The vaccine is tested bacteriologically from week to week, and when the test shows that the vaccine is germ free it is put up in capillary tubes in the usual manner. So when vaccine virus leaves the laboratory it is absolutely germ free and cannot cause any harm or transmit any disease for the reason that it does not contain any disease germs. To make a comparison with vaccine virus as made at the present time, it may be said that every cubic centimeter of milk contains from a few thousand to many millions of of bacteria, uncooked food contains them in great variety. The saliva of every one's mouth contains thousands to millions of bacteria. It is more dangerous to be kissed than it is to be vaccinated, for in the act of kissing thousands of bacteria are exchanged by contact of the moist lips, and many throat and lung diseases are transmitted in this way. Every glass of drinking water (unless boiled) contains from a few hundred to a few thousand bacteria, and many diseases are produced by an impure water supply.

All the beliefs, claims and prejudices upon which the anti-vaccinationists stand are knocked from under them by the present method of vaccine production and its application. In times past the method of production was objectionable in the light of present scientific knowledge. And the methods of vaccinating as then practiced are not tolerated at this time. Years ago it was customary to vaccinate from arm to arm, by which method many diseases were transferred from an infected person to a well one, but this is obsolete at the present time and is considered criminal to do so. The anti-vaccinationist makes his or her claims or argument upon facts and statistics raked up from bygone ages and before bacteriologic science pointed the way to make pure vaccine and so eliminate all objectionable features. They can't put forth one claim that vaccine at the present time is not pure and germ free, or that it will directly cause a harmful disease. It is to be admitted that there may be some post-vaccination complications, that is, some resulting trouble after a vaccination. But any such trouble is not due to the vaccine, but in every case it is due to an infection of the vaccination sore from improper attention to it. A vaccination sore should have the same attention as any other open wound and should never be exposed to the invasion of dust and dirt, as these are liable to carry harmful bacteria and seriously infect the sore. The arm should be bandaged from the time the vaccination is made until the sore is perfectly healed. If the sore becomes injured it should be thoroughly washed with boiled warm water and soap, and rebandaged with a sterile bandage. With this care and precaution there will be no bad after effects. Lockjaw (tetanus) is said to be one of the serious diseases following a vaccination. This disease is due to dirt, soil or earth, in which the germs of this disease reside, getting into the vaccination sore if it is allowed to remain unprotected by a bandage. Following the San Francisco earthquake and fire over a hundred thousand people were vaccinated during the following few weeks, and no serious trouble from this great number of vaccinations has been reported.

## DR. R. G. ECCLES ARRIVES FROM THE ORIENT

Dr. R. G. Eccles and Mrs. Eccles, who are making a tour of the world, arrived in San Francisco just as we go to press. The doctor's work is well known throughout the United States, he having been a prolific writer and experimenter in the field of chemistry and pharmacy. For some years he was editor of **Merck's Archives,** and a contributor to **Merck's Report,** and other journals.

## DR. FRANK S. JAMES

News of the death of this talented pharmaceutical writer came just as we were going to press last month. His remarkable career and attainments call for more than a passing notice at our hands, for he was the first of our contemporaries to give us words of encouragement when we first undertook, not without misgivings, to edit a drug journal.

Dr. James was for eighteen years the editor of the **National Druggist,** and it was soon after he had begun this work that he visited San Francisco to attend the meeting of the American Pharmaceutical Association. The acquaintance then made was renewed three years later when **The Pacific Druggist** fell into our hands. In the correspondence that grew out of this circumstance, how we did enjoy his beautiful letters!—beautiful in sentiment, beautiful in expression, and beautiful in chirography, for his handwriting was almost like copperplate. We saved saved them all, but they only fed the flames of April 19, 1906.

He was born in Alabama in 1841. As a boy he far outstripped his fellow-students in mathematics, the classics and English literature. "There is hardly a language," says the **National Druggist,** "with which he was not more or less familiar, and most of them he could read and translate with ease." At the age of twelve he took part in **the composition** of a comic French play, which was presented at the closing exercises of his school. At sixteen he went to Germany to study civil engineering, but at eighteen, having the good fortune to become a member of the household of Baron Justus v. Liebig, he became enthused over chemistry, and that became his favorite study.

His active mind, however, longed for more worlds to conquer; so he studied medicine, graduating in Paris just before the Civil War broke out. He returned to America and made the first torpedoes used in the war. In the early seventies he became the associate editor of the Memphis **Appeal,** and in 1877 began the practice of medicine in St. Louis, and there he lived the remainder of his life. From 1888 to his death, he was editor of the **National Druggist.** Here his versatility showed itself in the wide range of subjects appearing from time to time, the columns of this journal being considerably enriched by translations from foreign publications.

Not only was he a chemist, but also a microscopist, an inventor of chemical and microscopical appliances, a mechanic, a writer, an artist and a poet! Moreover, to the writer he was a friend, and we bear this tribute to his worth and talents.

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A complimentary dinner was given at the Hotel Portland, Portland, Oregon, to Professor Joseph P. Remington, on the occasion of his visit to that city last month. At the table sat Miss Kittie W. Harboard, secretary of the State Board of Pharmacy, class of '01; Louis C. Clarke, '76, of the drug firm of Woodard, Clarke & Co.; J. C. Wyatt, '95, of Vancouver, Wash.; E. B. Labbe, '95, and E. H. Laue, '95.

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We note that the **Interstate Medical Journal** has recently purchased the **St. Louis Courier of Medicine,** and the consolidation commences with the July issue. This merger adds strength and prestige to the **Interstate,** which had previously absorbed three other medical journals within the past few years. We do not need more of such publications but better, and this looks like a step towards betterment.

## DR. ENNO SANDER

We regret we were not among the jovial party who recently did honor to themselves in honoring their venerable friend, Dr. Enno Sander, on the celebration of his eighty-fifth birthday. As he was one of the founders of the college in 1863, filled the chair of botany and pharmacognosy from 1871 to 1873, and has ever since been a warm friend of the College of Pharmacy, the Alumni Association chose to observe this anniversary by a dinner and the presentation to the college of a life-size portrait of their guest. **Meyer Brothers' Druggist,** in describing the affair, says: "The pharmaceutical savant greeted his friends in a hearty manner, and gave them the treat of an informal chat, reciting many incidents of his early life, and interspersed his remarks with numerous anecdotes and the usual merry twinkle of his eye.

It is our good fortune to have among our warmest friends this most worthy pharmacist, "A fine old German gentleman, one of the olden time," and rejoice that his friends have seen to it that he should receive some of the honors due to a well-spent, unselfish life while he is yet young enough (for he is a very young old man) and bright enough to enjoy them.

The toasts, very suggestive, and happily "served," were as follows:

### Toasts

DR. OTTO AUGUSTUS WALL, JR., Toastmaster.
"My friends! I need not look beyond my heart to look for you!"

Presentation of Portrait of Dr. Enno Sander.
HENRY O. A. HUEGEL,
President of Alumni Association.

" 'Tis a goodly likeness and fair to look upon."

Acceptance of Portrait.
LORENZ A. SEITZ,
President St. Louis College of Pharmacy.

"I can no other answer make, but thanks, and thanks; and ever oft good turns are shuffled off with such uncurrent pay."

Our Guest.
DR. HENRY M. WHELPLEY.
"He knows what's what, and that's as high as Metaphysic wit can fly."
Our Honored Emeritus Professor.
DR. OTTO A. WALL.
"Thou wert my guide, philosopher and friend."
Dr. Sanders' Influence on Pharmacy in St. Louis."

PROF. JAMES M. GOOD.
"His heart is in his work,
And the heart giveth grace to every Art."

*Our Honorary Member.
WILLIAM H. LAMONT.
"You know I say just what I think and nothing more or less."

Enno Sander, the Man.
WM. C. BOLM.
"An honest man, close-buttoned to the chin,
Broadcloth without and warm heart within."

We hope at an early date to introduce Dr. Enno Sander to our readers as one of our collaborators. He is to give us some insight into the manufacture of artificial mineral waters, a subject with which he is probably more familiar than any other person on this continent.

We note with regret the retirement of Mr. Joseph Helfman from the editorship of the **Bulletin of Pharmacy.** Since Mr. Helfman took the editorial management of the **Bulletin,** it has steadily grown in attractiveness and usefulness until it has become one of the most suggestive and interesting of our exchanges.

The new editor, Mr. Harry Mason, is no stranger to the pharmaceutical world, for he is an able writer and has for some years done excellent work in the pages of the **Bulletin** and elsewhere. We are sure that his new responsibilities will rest lightly on his shoulders, for he is a strong man and likes hard work.

Mr. S. D. Clough, the affable manager for the Abbott Alkaloidal Company of Chicago, has been presented with a fine boy. Mother and son both doing splendid. Congratulations, old man. Sorry we can't drink a bumper with you to the "Big Three."

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*Dr. Sander is the only honorary member of the Alumni Association.

# THE EARLY HISTORY OF THE CALIFORNIA PHARMACEUTICAL SOCIETY

By James G. Steele.

On an evening in October, 1869, seventeen pharmacists met in the back room of a drug store on Montgomery Street, San Francisco, to take into consideration the conditions of the drug business in that city and to devise ways and means whereby a community of interests should be fostered and a society formed to elevate the cause of pharmacy in California. It was resolved to call a meeting of the druggists of San Francisco and contiguous towns, to be held the following month.

This meeting was held on an evening in the middle of November, at the court room in the old City Hall, and an association, to be called the California Pharmaceutical Society, was formed, officers elected, and a committee appointed to draw up a constitution and by-laws. For some years meetings were held monthly.

Among other objects for which the Society was established were "the advancement of pharmaceutical knowledge and the elevation of the professional character of apothecaries throughout the State of California," etc.

The Constitution was modelled after that of the American Pharmaceutical Association, an organization ever held in esteem by the pharmacists of the Pacific Coast.

The **first annual meeting** of the society was held in San Francisco on the evening of Monday, October 11, 1869. Alexander McBoyle being secretary. Twenty-five pharmacists were elected to membership at that meeting. Wm. Simpson, the president, then read his report. James G. Steele presented the report of the Executive Committee, which was ordered published, together with the Constitution and roll of members. The following persons were elected to serve as officers the ensuing year: President, John Calvert; First Vice-President, Jas. H. Widber; Second Vice-President, William M. Searby; Secretary, James G. Steele; Treasurer, Wm. J. Bryan; Executive Committee—William Simpson, Edward Neuman, W. C. Miller, William Geary and James G. Steele. At that meeting the subject of the establishment of a College of Pharmacy was considered.

The **second annual meeting** was held on Monday, October 10, 1870, at the rooms of the Society, No. 226 Sutter St., San Francisco. The report of the Executive Committee was read by Wm. Simpson, the chairman. Among the topics that had interested the Society during the past year, and which were referred to in this report, we find "Drug and Poison Bills," "Regulations Concerning the Drug Trade," "State and Preparation for Commerce of the Crude and Refined Chemical Products of California," "New Remedies," "Characteristic Botany of California," etc. The following officers were elected: President, John Calvert; First Vice-President, William Geary; Second Vice-President, G. G. Burnett; Secretary, James G. Steele; Treasurer, Wm. J. Bryan. The secretary reported 121 members as being upon the roll. Among the papers presented to the meeting were "Castor Oil, its production, sale, etc., on the Pacific Coast," by G. G. Burnett; "California

Wines, Brandies, etc.," by E. J. Richards; "Hops in California," by John Calvert.

The **third annual meeting** was held on the evening of Monday, October 10, 1871, at the rooms of the Society. The following were elected officers: President, A. J. Bauer; First Vice-President, Elmen Painter; Second Vice-President, William Geary; Recording Secretary, W. E. Mayhew; Corresponding Secretary, Wm. T. Wenzell; Treasurer, Wm. J. Bryan; Executive Committee—James G. Steele, John Calvert, W. E. Mayhew, W. T. Wenzell and Wm. Simpson. Papers were read on "Wenzell's Ergotine," by Wm. T. Wenzell; "Fluid Extracts vs. Tinctures," by John Calvert. During this year the Executive Committee of the Society drew up a bill "to regulate the practice of pharmacy in the City and County of San Francisco," which was passed by the Legislature and was in force until 1880, when, by the terms of the new Constitution of the State, it became special legislation, and as such unconstitutional. This law included sections regulating the sale of poisons.

Under this act (approved March 28, 1872) the following persons were elected by the Society as a Board of Pharmacy on May 10, 1872, to serve one year: John Calvert, president; W. T. Wenzell, William Simpson, J. W. Forbes; James G. Steele, Secretary.

The **fourth annual meeting** was held October 9, 1872. In addition to the President's report, the Board of Directors presented a lengthy report. The active membership was then 135, mostly residents of San Francisco.

On the 15th of December, 1871, the California Pharmaceutical Society was incorporated, with James G. Steele, John Calvert, W. E. Mayhew, Wm. Simpson, and Wm. T. Wenzell as Trustees and Directors. Legal enactments touching pharmacy were noted in the following States; Rhode Island, Maryland, Pennsylvania, Georgia, Kentucky, Illinois, New York, Massachusetts and California.

In the following summer (1872) steps were taken to establish a College of Pharmacy, and in August of that year the California College of Pharmacy was incorporated and the following officers elected: President, Wm. T. Wenzell; Secretary, J. W. Forbes; Treasurer, James G. Steele; Trustees—Wm. T. Wenzell, J. W. Forbes, J. G. Steele, John Calvert, Wm. E. Mayhew and Wm. Simpson. The following were appointed the Faculty: Chemistry, Max Tschirner; Pharmacy, Wm. T. Wenzell; Materia Medica, Wm. M. Searby, and Botany, Dr. Herman H. Behr. Among the "New Remedies" noted in the proceedings of this year were nitrite of amyl, condurango, xylol, tri-ethylic ether, apomorphia, eucalyptus globulus, yerba mansa, yerba santa and "unk weed" **(Thaspium cordatum).** On the receipt of news of the burning of Chicago, a committee was appointed to solicit contributions from druggists and $830.00 was collected and forwarded to the Chicago College of Pharmacy, to be applied to the relief of druggists who were financially crippled or rendered destitute by the fire. I quote the following from the secretary's report: "The third annual commencement exercises of the California College of Pharmacy shows the success of the infant school, which, as we all know, was the direct result of the existence of the Pharmaceutical Society. * * * It is incumbent on all, particularly the younger members, to evince by their attendance at our meetings and assistance in debates their appreciation of our association and a recognition of the fact that progress in pharmacy requires continued effort and attention on the part of her votaries."

The following officers were elected: President, Wm. M. Searby; First Vice-President, Emlen Painter; Second Vice-President, Alfred Gros; Treasurer, Wm. J. Bryan; Secretary, G. G. Burnett; Directors—Wm. T. Wenzell, John Calvert, Wm. Geary, G. G. Burnett, A. M. Kurtz.

A report was read from W. T. Wenzell, Secretary of the Board of Pharmacy, showing that between May 1, 1874, and October 1, 1875, there had been registered 123 Pharmacists and 94 assistants. The total number of retail drug stores in San Francisco on October 1, 1875, was 92.

During this year arrangements were made for the affiliation of the California College of Pharmacy with the State University, which was effected in accordance with the following:

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"**Agreement:**

"In accordance with the organic act of the University of California, the California College of Pharmacy is hereby affiliated with the University of California, upon the following basis:

"The College will maintain its own Board of Trustees and will continue to hold its own property as if this affiliation had not been agreed upon.

"The College will also appoint its own professors and establish its own course of instruction, subject to the general approbation of the Regents of the University.

"The University will confer the degree of Graduate in Pharmacy upon candidates recommended by the Board of Examiners of the College, and approved by a committee to be appointed by the Regents.

"This agreement may be cancelled by mutual consent at any time or by the withdrawal of either party to it, after a twelve months' notice to the other party."

The **Seventh Annual Meeting** was held in San Francisco on the evening of October 13, 1875. The report of the secretary, G. G. Burnett, showed that regular monthly meetings had been held with a fair average attendance. Various papers had been presented, among which were: "Ethics of the Profession," by Emlen Painter; "Suppositories," by G. G. Burnett, and "Syrup of Iodide of Iron," by Max Tschirner.

At the monthly meeting of the society held on November 10, 1875, Emlen Painter and James G. Steele were appointed a committee to "edit and published the Proceedings of the Seventh Annual Meeting, together with such matter pertaining to the College of Pharmacy and Board of Pharmacy as might be of interest to the members." This issue of the "Proceedings" of the Seventh Annual Meeting contained also the Proceedings of the Third Annual Meeting of the College of Pharmacy and the report of the annual commencement exercises of the same, with abstracts of theses by members of the graduating class, and the report of Wm. T. Wenzell, secretary of the San Francisco Board of Pharmacy; also a prospectus of the College of Pharmacy, with a list of questions submitted to candidates for the degree of Graduate in Pharmacy at the previous annual examination.

At the **Ninth Annual Meeting** of the society, held in January, 1878, James G. Steele reported on behalf of the Pharmacopœial Committee, and this report was afterward sent to Professor John M. Maisch, secretary of the American Pharmaceutical Association, and by him presented and read at the meeting of the association at Toronto, in September, 1874. This report was subsequently referred to the Committee of Revision of the National Association, of which Professor Emlen Painter was afterwards appointed a member. Shortly afterwards the following gentlemen were appointed a Sub-Committee on Revision of the Pharmacopœia: Messrs. Painter, Steele, Calvert, Searby, Wenzell, Lengfeld and Tschirner, Emlen Painter being chairman.

The following persons were elected as officers for the ensuing year: President, William M. Searby; first vice-president, William T. Wenzell; second vice-president, James Topley; corresponding secretary, F. C. Bauer; treasurer, William J. Bryan; librarian and curator, Emlen Painter; editor, William M. Searby. Board of Trustees—William T. Wenzell, John Calvert, A. L. Lengfeld, Max Tschirner, Emlen Painter, C. D. Zeile, James G. Steele.

The faculty of the College of Pharmacy for the session of 1878 were as follows: William T. Wenzell, Professor of Chemistry; William M. Searby, Professor of Materia Medica; Hermann Behr, M. D., Professor of Botany; Emlen Painter, Professor of Pharmacy and Dean of the Faculty.

The **Tenth Annual Meeting** of the society was held the 9th of January, 1879, when the following members were elected: Edw. Selzer, E. W. Runyon, A. Wellendorf, Adolph Kahn, R. P. Merrill, Dr. T. Keefe, John Devine, John H. Dawson, E. W. Joy, S. A. McDonnell, E. S. Parker, P. Weiss, W. H. McLaughlin, J. J. McDonnell, F. C. Keil, H. B. Slaven, P. Flatow, C. L. Steylaars, J. W. Wood.

Professor Painter presented a report from the Committee on the Revision of the United States Pharmacopœia, including an outline of the progress made by similar committees in the East and West. The following were elected officers for the coming year:

President, William Geary; first vice-president, James Topley; second vice-president, John T. Brady; corresponding secretary, F. C. Bauer; treasurer, William J. Bryan; librarian and curator, E. W. Joy; editor, William M. Searby.

The report of the secretary of the Board of Pharmacy showed 165 retail drug stores in the city.

The report of the secretary of the College of Pharmacy showed that on the sixth annual session there were 53 matriculants.

The **Eleventh Annual Meeting** of the California Pharmaceutical Society was held in San Francisco on January 9, 1880. By the president's report there were shown to be eight graduates from the infant College of Pharmacy. The society was felicitated by the president upon the numerous evidences of lively interest taken by the members.

The following officers were elected: President, John Calvert; first vice-president, A. L. Lengfeld; second vice-president, S. A. McDonnell; secretary, E. A. Schreck; treasurer, William J. Bryan; librarian and curator, P. S. Vreeland; editor, William M. Searby.

Among the papers read at this meeting were: "On Pills and Pill Excipients," by W. M. Searby, and "An Examination into the Composition and Merits of a Nostrum for the Cure of Opium Habit," by S. A. McDonnell.

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**The Council on Chemistry and Pharmacy**

We size up drugs and other things,
Includin' all the trimmin's.
It makes no difference who we are,
We do it all per Simmons.

So send along your specimens
If you would get your innin's,
Or else stay out and wait to get
Perdition dealt per Simmons.

—American Druggist.

## PROFESSOR J. P. REMINGTON VISITS THE COAST

If any pharmacist in this country has earned a vacation, it seems as if the subject of this notice was the man. Since the death of that tremendous worker, Dr. Charles Rice, nearly six years ago, Professor Remington has been called upon to take the chairmanship of the Committee of Revision of the United States Pharmacopœia, which work he had to assist in again revising after the passage of the Pure Food and Drugs Law. The last corrections of the committee are only just out. Then he had the lion's share of the work of revising—largely rewriting—the United States Dispensatory. During all this time he has held the chair (the chair could not hold him) of pharmacy in the Philadelphia College of Pharmacy, and has taken his part in the work of the American Pharmaceutical Association, the Pennsylvania and other State associations. And now he wants a rest.

And where could he so completely rest the tired body and refresh the weary brain as on the Pacific Coast? That is the reason why he is here. He has visited Seattle, Tacoma, Portland, and now he is in California. Here he is seeing the Yosemite, with its sheer precipices, its varied waterfalls, its rugged rocks, its snow-capped mountains. Here he is breathing the purest air, drinking the "livest" water, worshiping under the biggest trees in all Uncle Sam's domains. Soon he will be back in San Francisco, where less pleasant sensations await him. Yet we venture to say that all our discomforts, our wretched car system, our poor telephone service, our dust and dirt, our piles of brick and heaps of iron, our titanic struggle of man and horse and engine to bring order out of chaos and beauty out of desolation—all these things will not efface from his memory the sights and scenes of that wondrous Yosemite.

Professor Remington is greatly enjoying meeting his old pupils, who are to be found in almost every city. Some of them are older than he, and by no means so well preserved. He will return to the East by way of Los Angeles and other cities in the Southwest and South.

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## CONTRACT PLANS NOT DESTROYED

### The D. C. S. N. and Limited Contract Plans Have Not Been Declared Illegal by the Terms of the Injunction

The government's theory is that the contracts were procured as the result of conspiracy growing out of the tripartite relations of the three branches of the trade, so the manufacturers graduating from the tripartite plan into the D. C. S. N. plan have been ordered by the court, as the outcome of this theory, to cancel their contracts.

But there is nothing in the injunction to prevent any manufacturer desiring hereafter to operate under the D. C. S. N., or Limited Contract plans, doing so by **individually adopting and putting into effect either one of these plans.** He can adopt any other lawful plan for the protection of his wholesale and retail prices, **but he must do it alone, not "in collusion" with any other manufacturer or with any other agency or agencies.**

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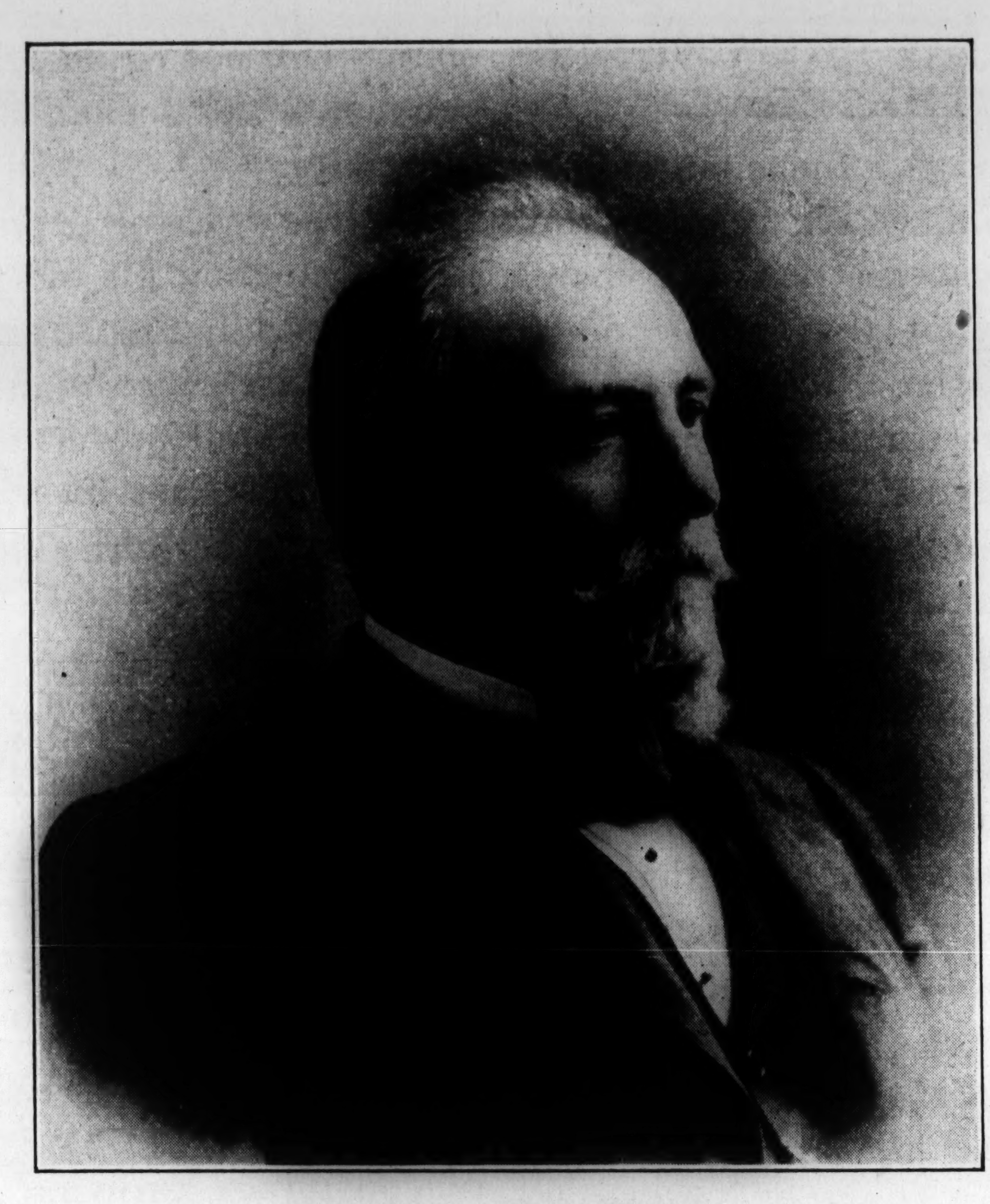
The Herbert E. Law Scholarship in the California College of Pharmacy has been awarded to Miss Mabell E. Merriam. This bright and industrious young lady is now employed during her vacation in the store of Phillip & Phillip, at Fruitvale.



**Professor John Calvert**
**1835-1906**

## EBERT—CALVERT

The closing months of the year 1906 witnessed the taking off of two prominent pharmacists, who occupied somewhat similar positions in their respective places of abode. For forty years both of them exerted an influence on pharmaceutical matters in the cities of their adoption; both aided in securing the recognition of pharmacy by appropriate legislation, both favored advanced education for pharmacists, both filled for a time chairs in colleges of pharmacy, both stood out against oppressive legislation affecting the drug trade, and both were at times unpopular with their associates because of frank expressions of opinion in opposition to the views of others. In addition to this both were men of more than common attainments in the scientific and literary world, Ebert being a Doctor of Philosophy of a German university, and Calvert well versed in literature, especially that of France. Ebert was known beyond the confines of his own State, having for many years been an active member of the American Pharmaceutical Association, whose meetings he always attended. While Calvert was a loyal member of the Association for twenty years, he was prevented by time and expense from attending its meetings, which were generally held in distant Eastern cities.

All the drug journals of the country vied with each other in doing honor to the memory of Albert E. Ebert. While we feel that the half has not been told that might have been said in his praise we will content ourselves at this remote day in recounting a few of the facts in the life of our late friend, Professor John Calvert, because we think his memory deserves more than a passing mention. He was born in Bishop Auckland, Durham County, England, February, 1835, and educated at the grammar school in that town. These "grammar schools," as they are called, were the best schools in England in those days, and might be called secondary schools. After leaving school he was apprenticed to Mr. Teneman, a "chemist" in the city of Durham. After serving a five years' apprenticeship he went to Paris "to attain a better knowledge of the French language." Here he was employed in a pharmacy for two years, when he returned to England and attended the School of Pharmacy of the Royal Pharmaceutical Society of Great Britain. On completing the course there he passed the "Major" examination, receiving the title "Pharmaceutical Chemist" in the year 1861. Shortly after this he engaged in the drug business in Leeds, England, but disposed of his store the following year, and proceeded to Victoria, B. C., via Cape Horn. He made a short visit to the Cariboo mines, but while he had considerable knowledge of mineralogy, he was not a successful miner; so he returned to Victoria, where he had a drug store for about two years. In 1865 bad times struck Victoria, and he left, coming to San Francisco, where he entered the employ of Wakelee & Co. In 1868 he and Emlen Painter, a fellow employee, bought the store of Charles Hinkley, on Kearny and Clay streets, where they quickly built up a fine business and made money. Both he and Mr. Painter took a lively interest in establishing and afterwards maintaining the California Pharmaceutical Society and the College of Pharmacy. He was at different times president of both institutions, and for three years professor in the College of Pharmacy. He read a number of papers before the society, and was one of its most faithful attendants and efficient officers. In later years he was a member of the State Board of Pharmacy for a term of four years, and for about the same period was its secretary. In all his work for the society and college his motives were absolutely free from selfishness. He sought the elevation of pharmacy by means of an advanced pharmaceutical education. As an examiner he was feared, because his manner was curt and unsympathetic. Yet his sympathy always went out to the candidate who was doing his best and contending with untoward circumstances.

In all matters affecting pharmaceutical legislation he took a lively interest, and his time was freely given to these things when the occasion arose. He had a good deal to do with the framing of the first pharmacy laws of California and with the making of public sentiment in favor of such legislation.

So, as we stated at the beginning, Calvert and Ebert were conspicuous in the ranks in two important centers of pharmaceutical movement, Chicago and San Francisco, and for what they did and their unselfish devotion to the cause of their fellow druggists, we do well to do them both honor.

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### $5,000,000 for Microbes

It is said that a wealthy Paris banker, a noted Jewish philanthropist, has recently bequeathed $5,000,000 to the Pasteur Institute for medical research.

It is hoped that microbes which have kept their identity secret will come to the front, "fess up" and ask for terms of immunity.

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During 1906 there was one life lost for every 366 persons employed in coal mining.

# MEDICINAL AND POISONOUS PLANTS OF CALIFORNIA

By Albert Schneider, Ph. D.

Professor Economic Pharmaceutical Botany, Histology and Bacteriology in the California College of Pharmacy.

## I.—Introduction.

The following list of medicinal and poisonous plants of California includes both native and introduced species and varieties. The list is not complete, as many of the more common fruit trees, shrubs, weeds, garden and pot herbs having more or less medicinal use, are not included, as they are almost universally known, and a mention here would be mere waste of space.

Details regarding range and distribution and description of species are omitted, as this information can be obtained in any handbook on California flora. A fuller discussion of the well-established medical properties of well-known medicinal plants is also omitted, as that information can be obtained from any standard work on vegetable drugs, such as the U. S. National and other Dispensatories, U. S. Pharmacopœia, text-books on materia medica, such as Maisch's, Wall's, Sayre's, Culbreth's and others. An effort has been made to cite the popular medicinal uses of plants by Indians, early settlers and the laity generally. With many of the plants mentioned this is the only use known. A further careful study may put many of these plants to the use of scientific medical practice.

It is found that there is a marked similarity in the home drug plant medication of the Indians and settlers. In fact, the settlers first learned the medical use of native plants from the natives. This is more fully treated in a paper on "The Medicinal Plants of the California Indians" (315). It will be found that the vast majority of plants used medicinally by Indians and the laity have laxative, diuretic and diapharetic properties. Some are used for their antiseptic and irritant (counter-irritant) properties. Experience has taught that if bowels, kidneys and skin are in good working order, sickness is not to be feared. This knowledge is, however, not scientifically deduced. The popular medicine is based upon the experience of many generations, and is not as haphazard as it is generally believed to be.

It is highly probable that some of the purely poisonous plants cited may finally prove of value medicinally. Within recent years considerable work has been done with regard to plants poisonous to cattle. Dr. Chesnut, of the Department of Agriculture, has made a careful study of the action of permanganate of potassium in counteracting the effects of the alkaloids of many of the poisonous plants of Montana and Colorado. His conclusions are that this substance, owing to its oxidizing powers, is a very effectual antidote if given before the alkaloid has been absorbed into the system.

As will be observed, cultural suggestions are given with a comparatively few plants only. This may be because nothing is known of the cultivation of many, or they may be so familiarly known as cultivated plants that a mention of that fact would be superfluous. It is desired to make clear that the entire subject is treated suggestively, serving merely as an introduction. Should, for example, some one contemplate the cultivation of digitalis, of valerian, of lavandula, or of crocus, the statements made regarding these drug plants and the citations of the literature pertaining thereto, would serve as a means of securing fuller, more exact information as to actual cultural procedure. Actual practice cannot be taught from books, and the would-be grower of drugs must, after all, learn through actual field and garden operations. It is also urgently advised to guard against illogical attempts, nor is it advised to make attempts out of idle curiosity. If a reasonably plausible plan suggests itself, study it thoroughly in all of its aspects and then, if still satisfied as to its practicability, begin active operations consistently and energetically. Half-hearted attempts quite generally result in total failure and serve furthermore to discourage others. The following questions should be carefully considered before an attempt at drug culture is made:

1. Is there an adequate market demand for the drug?
2. Is the market demand quite constant, or does it fluctuate greatly?
3. Has it been demonstrated that the plant will thrive in the particular locality in which it is to be grown?
4. Are the soil and climate well suited to the plant to be grown?
5. Is the necessary labor available?
6. Is the necessary machinery available?
7. Must artificial heat be employed in drying?
8. On how large a scale must cultivation be undertaken to make the venture reasonably profitable under average conditions of yield and of market demand and value?
9. How much capital will be required to undertake the venture properly and profitably?
10. Will there be strong competition and what influence will this have upon launching the enterprise and upon the net results?
11. Will it be advisable also to become manufacturer?
12. Is it intended to grow the drug for the retail or wholesale market, or both?
13. What are the enemies (pests, animal and vegetable) of the plant? What are the remedies?
14. How can the yield per acre be increased?
15. How can the percentage of active constituents be increased?

In the case of medicinal plants which have not yet been subjected to cultivation it remains to be determined what effect this will have upon the active constituents. Furthermore, what effect will transplanting to a new country have upon yield and active constituents? All of these matters must be considered very carefully, and the possibilities and probabilities carefully weighed.

The references cited with the plants mentioned will serve to readily obtain further information of a special nature. Unless otherwise stated it may be assumed that the plant cited is a native of the State and that it may be found in widely distributed areas within the State.

Some plants cited are of no practical value, but they are given in order to meet the request for information pertaining to them, which has come in from time to time. It may again be repeated that our knowledge of the properties of most of the native medicinal plants of California is very limited indeed. Some of them enjoy such a wide popular use that they should be thoroughly investigated chemically and therapeutically in order that it may be ascertained upon what these reputed virtues depend. This is, in fact, the prime object in preparing the following list of plants and the references to literature cited in the text and at the close.

## II.—The Native and Introduced Medicinal and Poisonous Plants of California.

1. **Abies concolor** Lindl. White fir. Coniferæ.

This tree is common throughout the State. Yields balsam. A decoction of the terminal branches is much used as a diuretic and in the treatment of malaria. (Calif. Geo. Survey. Bot. **2**: 118.) (U. S. Disp. 1538.)

Numerous other species and varieties are common and have similar uses.

2. **Abroma augusta** L. Wollut comul. Sterculiaceæ (Byttneriaceæ).

A handsome evergreen greenhouse tree from India, East Indies, Asia and Australia. The sticky white secretion from the fleshy root bark is said to be of great value in dysmenorrhœa. Fiber used for cordage.

**A. fatuosa** L. is also cultivated. (American Journ. Med. Sci., July, 1873.)

3. **Abronia fragrans** Esch. Fragrant abronia. Nyctaginaceæ.

A small herbaceous plant said to range from the Columbia river southward. Found in Southern California, Utah and New Mexico. Flowers very fragrant, and would, no doubt, prove useful in the manufacture of perfumery and sachet powders. (U. S. Geo. Survey. Wheeler's Report. Bot. **6**: 49.)

4. **Abronia latifolia** Esch. Nyctaginaceæ.

Common along the seashore from Vancouver Island to Monterey (Calif.). Flowers fragrant, as **A. fragrans.** Roots are eaten by the Indians.

5. **Abrus precatarius** L. Wild licorice. Crab's eye vine. Prayer beads. Jequirity. Leguminosæ.

A green house climber, native of India, which has been introduced into Africa, West Indies, South America and other countries. In the West Indies the roots are used like licorice. Seeds are very poisonous; used in Brazil as standards of weight. Used also in the treatment of conjunctivitis and keratitis. Seeds said to be eaten in Egypt; how prepared is not stated. Old-time criminal poisoning agent. Seeds are dangerous playthings for children. (Prac. A. Ph. A. **32**; 182-184, 1884.)

6. **Acacia** species. Acacias. Leguminosæ.

Numerous species and varieties have been introduced from Australia and elsewhere. No attempt has thus far been made to classify them accurately. Some assert that perhaps one hundred and more species and varieties are found in the State.

The gum (Gum Arabic) bearing acacias are thorny or prickly shrubs adapted to dry, sandy soils. The Australian gum or wattle gum is obtained from **A. pycnanthe** Beuth., **A. decurrens** Willd., **A. homolophylla** and perhaps other species. The bark, leaves and unripe fruit of some species are very rich in tannin and have been used in tanning. Some yield excellent timber.

It is to be hoped that someone will undertake and complete the great task of properly identifying the species and varieties of Acacias found in the State. (U. S. Disp.) (Bailey. Cycl. Am. Hart **5**.)

7. **Acacia catechu.** Gum acacia. Cutch. Leguminosæ.

Yields the familiar gum acacia, catechu or cutch of the pharmacists. Cultivated in the southern part of the State; not commercially, however.

8. **Acacia farnesiana.** Acacia. Leguminosæ.

A native of India cultivated in the southern part of the State. The very fragrant flowers yield a very delicious perfume on distillation. Extensively cultivated for perfumery purposes in Southern France. Worthy of careful consideration for culture purposes.

9. **Acacia Gregii.** Acacia. Leguminosæ.

Yields shellac in Arizona. **Larrea mexicana** also yields shellac. Both species occur in the State.

10. **Acacia pycnanthe** Benth. Wattle gum. Leguminosæ.

The bark is much used medicinally in Australia. The infusion is given in infantile diarrhœa and catarrhal ophthalmia. The tincture, mixed with glycerine, is useful for sore nipples, discharging ears and chapped lips. A bark wash is useful in sore throat, as a gargle. The gum is given internally to cure piles, and in veterinary practice is applied to raw shoulders. Action, no doubt, due to the tannin present.

Other useful species of Acacia are **A. verek** and **A. Adansonii,** which yield gum senegal. **A. ferruginea** and **A. leucophæa** yield an intoxicating liquor. Whether these and some other species occur in the State is not definitely known. They would, no doubt, thrive well.

11. **Acer macrophyllum** Pursh. Large-leaved maple. Rutaceæ.

Common ornamental tree in northern part of State. Medicinal properties doubtful and use uncertain.

12. **Acer negunda Californicum** Sarg. Box elder. Rutaceæ.

A common native. Medicinal use doubtful.

13. **Acer saccharinum.** Sugar maple. Rutaceæ.

Yields maple sugar. According to Weschke this tree contains an alkaloid. (Contrib. Dept. Pharm., Univ. Wisconsin, 1886.)

14. **Achillea millefolium** L. Yarrow. Milfoil. Compositæ.

A well-known old-time medicinal herb, common everywhere. Yields oil. Has an extensive popular medicinal use among Indians and settlers. Tea is used in consumption, stomachache, headache; a lotion is used for sprains, etc. (Contrib. U. S. Natl. Herb. **7**: III, 391.)

15. **Achras sapota.** Nose berry. Sapodilla. Sapotaceæ.

Native of West India, cultivated in Southern California. Fruit edible. Yields "chicle" or chewing gum.

16. **Achyrachæna mollis** Schauer. Compositæ.

Indians of California use the seeds for pinole (parched, ground and mixed with water). (Contrib. U. S. Natl. Herb. **7**: III, 392.)

17. **Aconitum species.** Monk's-hood. Ranunculaceæ.

The native species are no doubt all poisonous and require further study chemically. (Calf. Geo. Survey. Bot. **1**: 12.)

18. **Aconitum columbianum** Nutt. Aconite. Monk's-hood. Ranunculaceæ.

A native found in moist, open woods along brooks of Oregon, Washington, California, Montana, Wyoming, Colorado and South Dakota. This is the most important of the native species. All parts of the plant are poisonous, seeds and roots most. The poisonous principle of this plant is, no doubt, closely related to that of **A. napellus** L. It requires further careful study. The roots have been mistaken for horseradish and the leaves for those of parsley. Many human beings and many heads of cattle have been poisoned by it. Treatment as for aconite poisoning.

19. **Aconitum fisheri** Reich'b. Aconite. Ranunculaceæ.

This European species is by some authorities believed to identical with **A. columbianum.** This is a controversy of considerable importance. **A.**

**fisheri** is said to be used as an adulterant of the official **A. napellus.**

20. **Aconitum napellus** L. Aconite. Wolf's-bane. Monk's-hood. Ranunculaceæ.

A well-known, very important medicinal plant of which garden varieties (English and German aconites) are grown throughout the State. Some have escaped from cultivation. Aconite for medicinal purposes is extensively grown in England and Germany. It could, no doubt, be very profitably grown in California. Good leaves are worth about fifteen to twenty cents per pound wholesale. (G. S. Levy. **Aconitum napellus.** Calif. Coll. Pharm., Thesis, 1901.) (W. J. Peters. **Aconitum napellus.** Calif. Coll. Pharm., Thesis, 1902.)

21. **Acorus calamus** L. Sweet flag. Araideæ.

The dried rhizomes have been much used as a popular blood purifier and bitter aromatic tonic, and as a sialagogue. Used in flatulency, colic and typhoid conditions. Also used in beer making, in the preparation of hair powders, sachet powers, perfumery and in flavoring gin. Grows in marshy soils. (Miss B. Hutchins. Calamus. Calif. Coll. Pharm., Thesis, 1901.)

22. **Actæa eburnea** Rydb. Ranunculaceæ.

This plant is said to be poisonous and requires further study.

23. **Actæa spicata.** Cohosh. Baneberry. Ranunculaceæ.

The black berries are poisonous; mixed with alum they yield a black dye. Roots are antispasmodic and expectorant.

24. **Actæa spicata arguta** Torr. Baneberry. Ranunculaceæ.

Found in rich, rocky woodland soils. Highly esteemed as a medicine by the Indians. Acts as a purgative and in large doses as an emetic. The varieties **A. spicata alba** and **A. spicata rubra** have similar uses and properties. (F. Stearns, Proc. A. Ph. A., 1858.)

25. **Adenostoma fasciculatum** Torr. Chamisso. Greasewood. Rosaceæ.

Given to sick cows by the Coahuilla Indians according to Barrows. Requires further study.

26. **Adenostoma sparsifolium** Torr. Yerba del pasmo. Bastard cedar. Convulsion herb. Rosaceæ.

Used by early Spanish settlers as a remedy for numerous ailments, as colds, cramps, lockjaw, snake bite and tetanus. The powdered twigs and leaves, fried in oil or grease, are used as an ointment. The twigs, steeped in a drink, are given to produce vomiting and to give bowel relief. (See paper by Barrows.) (Bailey's Cyclo. Am., Hart, 24.)

27. **Adiantum capillus-veneris** L. Venus's hair fern. Polypodiaceæ (Ferns).

A well-known fern. A syrup (Sirop de capillaire) of this plant is much used as a cough remedy. (Calif. Geo. Survey. Bot. **2**: 342.)

28. **Adiantum pedatum** L. Maiden hair fern. Polypodiaceæ.

Used in chronic catarrh and lung trouble. Stems used by Indians in basket and hat making. **A. nigrum** is similarly used.

29. **Æsculus californica** Nutt. California buckeye. Horse chestnut. Sapindaceæ.

A native ornamental tree. The bark is used to cure toothache and other aches. The fresh, unripe fruit is used by Indians to poison fish. The ripe fruit, raw or cooked, is eaten by Indians, fed to squirrels and given to horses to remove bots. Bark is said to produce abortion in cows. The mistletoe growing on this tree is also said to produce abortion. Requires further careful study as to chemistry of constituents and physiological action. (Contrib. U. S. Natl. Herb. **7**: III, 366.) (Calif. Geo. Survey. Bot. **1**: 106.)

30. **Æsculus globra** L. Ohio buckeye. Sapindaceæ.

A well-known tree which is cultivated in many parts of the United States. Poisonous in over doses, producing symptoms like those by corn cockle **(Agrostemma githago).** The fruit yields abundant starch. Roots and fruit used as a substitute for soap, due to the saponin present. Said to be useful in portal congestion.

31. **Æsculus hippocastanum** L. Horse chestnut. Sapindaceæ.

A well-known ornamental tree which is grown in nearly all parts of the United States. The bark and nuts are used as snuff and in the preparation of a wash for ulcers. In England the fruit is fed to cattle. (Am. Journ. Pharm., **44**: 400.)

32. **Æsculus pavia** L. Red buckeye. Sapindaceæ.

A native of the Eastern and Southern United States, but can be cultivated almost anywhere. The active constituent of this plant is supposed to be nearly identical with that of the corn cockle. It is especially abundant in the young shoots and in the seed. Used to poison fish. It is also reputed to be a useful convulsant. (E. E. Batchelor. Am. Journ. Pharm., **45**: 144.)

33. **Agaricus campestris** L. Toadstool. Mushroom. Agaricaceæ (Fungi).

Edible. At first refused by Indians until taught by whites. Reported to be poisonous.

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A Paris pharmacist whose dispensing error caused the death of an old lady suffering from heart disease, was fined $120, and compelled to pay the funeral expenses, $400, and to pay an annuity of $160 to a relative of the victim.

## Will Still Control Retail Price of Proprietaries

To show that the Indianapolis decision does not prevent a proprietor from protecting himself from loss of business and the retailer from loss of legitimate profit, the Miles Medical Company, having cancelled all their original contracts to which jobbers and retailers were parties, are now making new contracts direct with the retailers. In their circular they quote the following paragraph from the injunction decree:

> "Nothing herein shall be construed to restrain or interfere with the action of any single corporation, partnership or individual by its, their or his officers or agents from acting or contracting in any lawful manner with respect to its, their or his own corporate, firm or individual property or affairs, and no provision or clause of this decree shall be held to restrain, affect or enjoin the sale of any drugs or merchandise, or the making or securing of any contract, plan or schedule as described in the bill of complaint when such sale or contract, plan or schedule relates only to trade or commerce within a particular state."

After stating that they will "lawfully protect their business from the attacks of the professional price demoralizers," they say:

> These contracts are formulated and issued without consultation with or the knowledge of any organization or any individual in the trade, and will be established, operated and maintained without understanding, agreement or combination with any persons or organization. Such contracts are therefore unaffected by the decree mentioned.
>
> This will enable you to purchase the Dr. Miles Medicines, which you cannot otherwise do, **as only authorized agents may obtain the goods.**

Doubtless many other firms whose business comes within the regulations of interstate laws will take a similar course.

## IMPORTANT RULING ON LABELING.

### Labels Must State Alcohol Contents of All U. S. P. Preparations.

### Percentage of Alcohol in the Federal Pure Food Law Means Absolute Alcohol.

Some of our subscribers having asked us whether it was necessary that labels of preparations of the United States Pharmacopœia and National Formulary should state the percentage of alcohol which they contain, and also whether the percentage should be given in figures to represent official alcohol or absolute alcohol, we addressed the following communication to the Secretary of Agriculture:

San Francisco, May 31, 1907.

Hon. James Wilson,
Secretary of Agriculture.

Dear Sir:

Will you kindly inform us whether preparations of the United States Pharmacopœia, such as paragoric, tincture of arnica, etc., are required to bear a label showing the percentage by volume of alcohol which they contain?

Also, in giving the percentage of alcohol in all preparations, should the percentage of absolute alcohol or official alcohol be given?

Your reply will greatly oblige,

Yours respectfully,
THE PACIFIC PHARMACIST.
Per W. M. Searby.

To this letter we received the following reply:

W. M. Searby,
410 Kearny St.,
San Francisco, Cal.

Dear Sir:

In reply to your favor of May 31st, we desire to state that the per cent of absolute alcohol contained in a remedy should be indicated on the label directly under the name of the product. This also applies to United States Pharmacopœial and National Formulary preparations.

Respectfully,
H. W. WILEY,
Chief.

This is a most important matter to every pharmacist, wholesale and retail. It will put every one to the expense of either having a new label printed for each of these official preparations, or an extra label bearing the alcohol per cent to be used in connection with the ordinary label. In consequence of the differing percentages of alcohol present in these official preparations, it will probably be much more inconvenient and almost as expensive to have these extra labels printed as it will be to have a complete new outfit for alcohol-containing preparations. It will not be an easy matter to give the exact percentage in all of these preparations. In our last issue we noted the fact that there were considerable differences of opinion among manufacturers as to the amount of alcohol present in fluid extracts, tinctures, etc. Different operators, working with different quantities under somewhat different conditions, will differ from each other in their estimate of the amount of alcohol present in the finished product. The loss from evaporation in percolating, filtering, etc., varies with different manipulators. All of these discrepancies tend to throw the manufacture of alcoholic galenicals into the hands of the large manufacturing concerns who, operating on large quantities, can determine in each case exactly the alcohol content. Having determined, after careful experimentation, precisely the percentage of alcohol in the finished product, they can establish their standard, and make the preparation conform to that every time. They can then sell the same preparation with the same label from year to year.

It would seem as if the Pharmacopœia Revision Committee should prepare and publish a statement showing the percentage that should be in the finished product in the case of every alcoholic galenical. This percentage might be given in figures somewhat elastic; for instance, a statement similar to that of the purity rubric in other cases would read somewhat like this: "fluid extract of —— should contain from 44.5 to 46% of absolute alcohol." Such a range would be near enough for the preservation of the preparation, and would leave room for such variation as might occur through slightly different modes of manipulation.

The whole subject is a large one, and it is not possible as yet to foresee the full effect of Dr. Wiley's interpretation of the law.

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## LIST OF FOOD INSPECTION DECISIONS.

F. I. D. 1-39 practically concern imported foods only and were not issued under the food and drugs act, June 30, 1906.

F. I. D. 40. Filing Guaranty.
41. Approval of Labels.
42. Mixing Flours.
43. Relabeling of Goods on Hand.

F. I. D. 44. Scope and Purpose of Food Inspection Decisions.
45. Blended Whiskies.

F. I. D. 46. Fictitious Firm Names.
47. Flavoring Extracts.
48. Substances Used in the Preparation of Foods.

## FOOD INSPECTION DECISIONS.

### [F. I. D. 40.]

### FILING GUARANTY.

In order that both the Department and the manufacturer may be protected against fraud it is requested that all guarantees of a general character filed with the Secretary of Agriculture in harmony with Regulation 9, Rules and Regulations for the Enforcement of the Food and Drugs Act, June 30, 1906, be acknowledged before a notary or other official authorized to affix a seal. Attention is called to the fact that when a general guaranty has been thus filed every package of articles of food and drugs put up under the guaranty should bear the legend, "Guaranteed under the Food and Drugs Act, June 30, 1906," and also the serial number assigned thereto, if the dealer is to receive the protection contemplated by the guaranty. No other word should go upon this legend or accompany it in any way. Particular attention is called to the fact that nothing should be placed upon the label, or in any printed matter accompanying it, indicating that the guaranty is made by the Department of Agriculture. The appearance of the serial number with the phrase above mentioned upon a label does not exempt it from inspection nor its guarantor from prosecution in case the article in question be found in any way to violate the food and drugs act of June 30, 1906.

Approved:
JAMES WILSON,
Secretary of Agriculture.
Washington, D. C., October 25, 1906.

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### (F. I. D. 41.)

### APPROVAL OF LABELS.

Numerous requests are referred to this Department for the approval of labels to be used in connection with articles of food and drugs under the food and drugs act of June 30, 1906. This act does not authorize the Secretary of Agriculture nor any agent of the Department to approve labels. The Department therefore will not give its approval to any label. Any printed matter upon the label implying that this Department has approved it will be without warrant. It is believed that with the law and the regulations before him the manufacturer will have no difficulty in arranging his label in harmony with the requirements set forth. If there be questions on which there is doubt respecting the general character of labels, decisions under the food and drugs act will be rendered, of a public character and published from time to time, covering such points.

Approved:
JAMES WILSON,
Secretary of Agriculture.
Washington, D. C., October 25, 1906.

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Section (i) of Regulation 17 provides that—

The regulation regarding the principal label will not be enforced until October 1, 1907, in the case of labels printed and now on hand, whenever any statement therein contained which is contrary to the food and drugs act, June 30, 1906, as to character of contents, shall be corrected by a supplemental label, stamp, or paster. All other labels now printed and on hand may be used without change until October 1, 1907.

It is held that under this regulation labels which contain statements relating to the name of manufacturer, the place of manufacture, etc., which are not in harmony with the general meaning of the law may be used if on hand on the 1st of January, 1907, the day on which the regulations become effective. Any statement, however, respecting the character of the contents which is false or misleading should be corrected as indicated. The correction should secure the obliteration of the misstatement either by placing the supplemental label or paster over it or obliterating it in some other way. If the goods contain artificial color or preservative other than ordinary condimental substances (salt, sugar, vinegar, wood smoke, spices, and condiments of all kinds), that fact should appear upon the supplemental stamp or paster. If any of the words required to be placed upon drugs and foods in the specific wording of the act do not appear upon the label, such as alcohol, opium, etc., it is held that the correction must include the enumeration of these substances, as provided for in Regulations 28 and 29.

If goods that are packed and sealed in a carton which contains the bottle or other package also sealed and labeled were not in the hands of the manufacturer after January 1, 1907, but had been already delivered to the jobber or dealer, it will be held sufficient to mark the external carton alone, provided the goods are sold only in the unbroken carton. If the container, however, holds a large number of separate packages, it will be necessary that each of the separate packages to be sold as such shall be labeled with the words required specifically by the act.

It must not be forgotten that Regulation 17, section (i), is for the purpose of avoiding the expense of relabeling articles already packed and branded at the time the regulations go into effect and which necessarily could not have been so packed and branded with any intent to evade the provisions of the law, and it is expected that jobbers and dealers will do everything in their power to bring the packages now on hand into as close harmony with the provisions of the act and the regulations made thereunder as possible.

All articles in the hands of manufacturers, jobbers, and dealers on the 1st day of January, 1907, which are sold wholly within the State in which they are found on that date are exempt from the provisions of the act. Thus the use of the supplemental label, stamp, or paster is required only on those articles which on or after the 1st day of January, 1907, enter interstate commerce or are offered for sale in the District of Columbia and the Territories. It is believed that the provisions of Regulation 17, section (i), can be complied with without great annoyance and expense. It will be deemed sufficient if the supplemental pasters and labels are attached at the time the goods are shipped beyond the State line, that is, they need not necessarily be attached to such article on the 1st day of January, but at any time thereafter when prepared for interstate commerce. Thus the labor of meeting this requirement will be distributed according to the exigencies of actual trade. On and after October 1, 1907, the labels must be originally properly printed, and no further amendment will be considered.

Approved:
W. M. HAYS,
Washington, D. C., November 6, 1906.

### (F. I. D. 44.)

### SCOPE AND PURPOSE OF FOOD-INSPECTION DECISIONS.

From the tenor of many inquiries received in this Department it appears that many persons suppose that the answers to inquiries addressed to this Department, either in letters or in published decisions, have the force and effect of the rules and regulations for the enforcement of the food and drugs act of June 30, 1906. The following are illustrations of the inquiries received by this Department:

Must we stamp all goods as conforming to the drug and food law, whether they have alcohol and narcotics therein, or not?

On a brand of salad oil, which is a winter-strain cotton-seed oil, can it be sold under the brand of salad oil, or must it state that it is cotton-seed oil?

It seems highly desirable that an erroneous opinion of this kind should be corrected. The opinions or decisions of this Department do not add anything to the rules and regulations nor take anything away from them. They therefore are not to be considered in the light of rules and regulations. On the other hand, **the decisions and opinions referred to express the attitude of this Department in relation to the interpretation of the law and the rules and regulations, and they are published for the information of the officials of the Department who may be charged with the execution of the law and especially to acquaint manufacturers, jobbers, and dealers with the attitude of this Department in these matters.** They are therefore issued more in an advisory than in a mandatory spirit. It is clear that if the manufacturers, jobbers, and dealers interpret the rules and regulations in the same manner as they are interpreted by this Department, and follow that interpretation in their business transactions, no prosecution will lie against them. It needs no argument to show that the Secretary of Agriculture must himself come to a decision in every case before a prosecution can be initiated, since it is on his report that the district attorney is to begin a prosecution for the enforcement of the provisions of the act.

In so far as possible it is advisable that the opinions of this Department respecting the questions which arise may be published. It may often occur that the opinion of this Department is not that of the manufacturer, jobber, or dealer. In this case there is no obligation resting upon the manufacturer, jobber, or dealer to follow the line of procedure marked out or indicated by the opinion of this Department. Each one is entitled to his own opinion and interpretation and to assume the responsibility of acting in harmony therewith.

It may be proper to add that in reaching opinions and decisions on these cases the Department keeps constantly in view the two great purposes of the food and drugs act, namely, **to prevent misbranding and to prohibit adulteration.** From the tenor of the correspondence received at this Department and from the oral hearings which have been held, it is evident that an overwhelming majority of the manufacturers, jobbers, and dealers of this country are determined to do their utmost to conform to the provisions of the act to support it in every particular, and to accede to the opinions of this Department respecting its construction. It is hoped, therefore, that the publication of the opinions and decisions of the Department will lead to the avoidance of litigation which might arise due to decisions which may be reached by this Department indicating violations of the act, violations which would not have occurred had the opinions and decisions of the Department been brought to the attention of the offender.

JAMES WILSON,
Secretary of Agriculture.
Washington, D. C., December 1, 1906.

### FOOD INSPECTION DECISION 46, AS AMENDED.

### Fictitious Firm Names.

**F. I. D. 46, issued on December 13, 1906, on the subject of fictitious firm names, is hereby amended to read as follows, for the purpose of obviating any ambiguity that may have existed in the original decision. The amended portion is set in italics.**

The following extract from a letter is typical of a question frequently asked:

In connection with our manufacture of flavoring extracts, we produce an article containing a certain percentage of artificial coumarin and vanillin. This product has been placed on the market under the name of —— and Company, a fictitious firm, although dealers have always understood that it was our product. Is there any objection to our continuing to brand the product as manufactured by —— and Company?

The same question has frequently been asked by importers who state that they desire to assume the responsibility for particular brands.

It has been held by the Attorney-General (F. I. D. 2) that—

the words " * * * Daisy Sugar Corn, —— —— Company, Milwaukee, Wis.," clearly imply that the goods referred to are manufactured or perpared by that company in Wisconsin. The general public, unfamiliar with trade practices, would inevitably reach that conclusion.

Regulation 18 provides that if the name of the manufacturer and the place of manufacture be given, they must be the true name and the true place. It would appear, therefore, that the use of a fictitious name in such a manner that it would be understood to be the name of the manufacturer would be clearly a violation of Regulation 18. It is apparent that the provisions of Regulation 18 will not be fulfilled by the nominal incorporation of a fictitious firm. The regulations require that goods must be actually manufactured by the firm represented on the label as the manufacturer.

When a proper name, other than that of the manufacturer, is placed upon a label it must not be used in the possessive. For instance,

**Charles Gaston's**
**Olive Oil**
**Bordeaux**

can only be properly used on an oil manufactured by Charles Gaston at Bordeaux. The same is true if the designation

**Gaston's**
**Olive Oil**
**Bordeaux**

be employed.

On the other hand, the word "Gaston" might be used in an adjective sense, and not in the possessive case as qualifying the words "olive oil," in a manner that would indicate that it represented a brand and not a manufacture, as

**Gaston Olive Oil.**

Or,

**Olive Oil, Gaston Brand.**

In such case, however, neither given name nor initials should be employed. The word

"Gaston" should be in the same type as "olive oil" and in equal prominence, thus forming a part of the label.

*The phrase, "Olive Oil, Charles Gaston Brand," may be used, in which case the name of the actual manufacturer should appear, in order that no false indication of the name of the person or firm manufacturing the product may be given.*

JAMES WILSON,
Secretary of Agriculture.
Washington, D. C., February 21, 1907.

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### (F. I. D. 47.)

### FLAVORING EXTRACTS.

The percentage of alcohol is not required to be stated in the case of extracts sold for the preparation of foods only. It is held, however, that extracts which are sold or used for any medicinal purpose whatever should have the percentage of alcohol stated on the label.

Numerous inquiries are received regarding the proper designation of products made in imitation of flavoring extracts or in imitation of flavors. Such products include "Imitation vanilla flavor," which is made from such products as tonka extract, coumarin, and vanillin, with or without vanilla extract. They may also include numerous preparations made from synthetic fruit ethers intended to imitate strawberry, banana, pineapple, etc. Such products should not be so designated as to convey the impression that they have any relation to the flavor prepared from the fruit. Even when it is not practicable to prepare the flavor directly from the fruit, "imitation" is a better term than "artificial."

These imitation products should not be designated by terms which indicate in any way by similarity of name that they are prepared from a natural fruit or from a standard flavor. The term "venallos," for instance, would not be a proper descriptive name for a preparation intended to imitate vanilla extract. Such products should either be designated by their true names, such as "vanilla and vanillin flavor," "vanillin and coumarin flavor," or by such terms as "imitation vanilla flavor" or "vanilla substitute."

Articles in the preparation of which such substitutes are employed should not be labeled as if they were prepared from standard flavors or from the fruits themselves. For instance, ice cream flavor with imitation strawberry flavor should not be designated as "strawberry ice cream." If sold as strawberry ice cream without a label the product would appear to be in violation of Regulation 22.

Artificial colors should be declared whenever present.

JAMES WILSON,
Secretary of Agriculture.
Washington, D. C., December 13, 1906.

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### Envoy.

She's the debonair creation of the higher
education—
She's a harmless comic supplement unto
the college man—
And he finds her passing handy—for a
dance she's just the candy—
Though she takes herself too serious no
other person can.

She's the Rah-Rah-College Woman—
she's an automatic joke.
With a sweater and a pencil and a
book—
She has piped the men completely and
she imitates them sweetly
With the regulation college co-ed
look.

(The Pelican—U. C. Josh Magazine.)

### C. D. Fairbanks Hurt by Acid

In replacing a bottle filled with nitric acid on the shelf in the store of Crane & Fairbanks at Santa Barbara the other day, C. D. Fairbanks allowed the bottle to slip from his hand. To save it from breaking over him, he gave it a push, and it struck a bottle of hydrochloric acid, and the impact broke them both. The hastily manufactured Aqua Regia splashed over Mr. Fairbanks' leg and arm. Instantly he rushed for the ammonia bottle, which neutralized the acid, but unfortunately did some damage on its own account. However, the last report was that Mr. Fairbanks' injuries were not so serious as they were at first believed to be, and it is expected that he will be all right again in a few days.

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## WASHINGTON STATE PHARMACEUTICAL ASSOCIATION

The W. S. P. A. will meet on July 18, 19, and 20, at Moclips-by-the-Sea. A most enjoyable time is promised, with some good practical papers sandwiched in between the entertainments from day to day. Everybody go!

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### Turpentine Distillery

It is reported that the Diamond Match Company, who own large tracts of coniferous timber land, will shortly erect a plant at Sterling City for the extraction of the oil of turpentine from the waste pine wood of their factory. After obtaining the oil, the residue will be converted into paper pulp. This will give employment to a number of workmen and convert waste material into valuable by-product.

N. B.—There are big fortunes to be made out of the wasted materials in this land of plenty. It often happens that the easiest way of getting rich is by finding a use for what another man has thrown away.

## OFFICIAL ANTIDOTES ADOPTED BY THE CALIFORNIA STATE BOARD OF PHARMACY, APRIL 24, 1907

**Emetics.**—When a physician is at hand the most prompt emetic and the one most easily administered is one-tenth grain Apomorphine hypodermically.

**Demulcent Drinks.**—Flax-seed tea, slippery elm tea, barley water, thin starch water, etc., milk, white of eggs with water.

**Acid, Arsenous.**—Emetic of mustard, hydrated oxide of iron, a cupful; follow with olive oil or white of eggs, mucilaginous drinks. Laudanum (20 drops) if much pain.

**Acid, Carbolic.**—Dilute alcohol or whiskey and albuminous substances, milk, white of eggs, etc.

**Acid, Hydrocyanic.**—Cold water to head and spine. Give stimulants. Inhalation of ammonia. Artificial respiration.

**Acid, Muriatic.—Acid, Nitric.—Acid, Nitro-Muriatic. — Acid, Sulphuric. —** Give no emetics. Give at once large draughts of water or milk. Soft soap or soap and water, or white of eggs beaten up with water, or give olive oil.

**Acid, Oxalic.**—Give chalk or whiting (a tablespoonful), or plaster off the wall suspended in water. Emetic of mustard, large draughts of warm water, olive oil, mucilaginous drinks, stimulants (whiskey, etc.). Apply warmth to the extremities.

**Aconite, Its Preparations or Derivatives.**—Emetic of mustard followed by large draughts of warm water, then strong tea or coffee, or whiskey. Keep patient in horizontal position. Keep up artificial respiration.

**Antimony and Its Preparations—(Tartar Emetic).**—Give emetics of mustard or zinc sulphate. Milk, white of eggs freely mixed with water. Demulcent drinks.

**Antiseptic Tablets (Corros. Sublim.).**—Give white of eggs, flour or starch mixed with water, emetic of mustard. Give strong tea or coffee, stimulants (whiskey, etc.) if needed afterwards, demulcent drinks.

**Arsenic.**—Emetic of mustard, hydrated oxide of iron a cupful, follow with olive oil or white of eggs, mucilaginous drinks. Laudanum (20 drops) if much pain.

**Belladonna, Its Preparations or Derivatives.**—Emetic of mustard followed by large draughts of warm water; then strong tea or coffee. Arouse patient and keep him in motion.

**Bromine.**—If inhalation: fresh air, inhalation of ammonia. If swallowed: Emetic, starch, followed by magnesia bi-carbonate of soda, white of eggs, milk, flour and water.

**Cantharidies.**—Avoid oils. Emetics first of all. Demulcents, stimulants. Employ artificial heat externally.

**Chloral Hydrate.**—Horizontal position, cold water to head and stimulants. Emetic of mustard.

**Chloroform.** — Horizontal position, cold water to head and stimulants. Emetic of mustard.

**Cocculus Indicus.**—Emetic of mustard followed by large draughts of warm water. Give powdered charcoal. To relieve spasms let patient inhale pure chloroform or give chloral hydrate (25 grains).

**Conium.**—Emetic of mustard followed by large draughts of warm water; then strong tea or coffee. Arouse patient and keep him in motion.

**Corrosive Sublimate.**—Give white of eggs, flour or starch mixed with water, emetic of mustard. Give strong tea or coffee, stimulants (whiskey, etc.). If needed afterward, demulcent drinks.

**Corrosive Sublimate Tablets.**—Give white of eggs, flour or starch mixed with water, emetic of mustard. Give strong tea or coffee, stimulants (whiskey, etc.). If needed afterward, demulcent drinks.

**Cotton Root and Its Preparations.**—Emetic of mustard followed with large draughts of warm water, strong tea or coffee, stimulants (whiskey, etc.) freely. Keep patient in horizontal position, employ warmth to extremities, artificial respiration.

**Cowhage.**—Large doses of olive oil.

**Creosote.**—Emetic of mustard, white of eggs beaten up with water, olive oil, magnesia, stimulants (whiskey, etc.) freely. Keep patient in horizontal position, employ warmth and friction to the extremities.

**Croton Oil.**—Give white of eggs or flour mixed with water, emetic of mustard. Give strong tea or coffee, stimulants (whiskey, etc.). If needed, demulcent drinks.

**Cyanide Potassium.**—Cold water to head and spine. Give stimulants. Inhalation of ammonia. Artificial respiration.

**Digitalis, Its Preparations and Derivatives.**—Emetics of mustard followed with large draughts of warm water, strong tea or coffee, stimulants (whiskey, etc.) freely. Keep patient in horizontal position, apply warmth to extremities, artificial respiration.

**Ether.**—Horizontal position, cold water to the head and stimulants. Emetic of mustard.

**Formalines, or Solution of Formaldehyde.**—Give ammonia in diluted solution with demulcent drinks. Also inhalations of ammonia.

**Fowler's Solution.**—Emetic of mustard, hydrated oxide of iron, a cupful; follow with olive oil or white of eggs, mucilaginous drinks. Laudanum (20 drops) if much pain.

**Gelsemium.**—Coffee, brandy, emetic of ipecac.

**Hyoscyamus, Its Preparations or Derivatives.**—Emetic of mustard, followed by large draughts of warm water; then strong tea or coffee. Arouse patient and keep him in motion.

**Indian Hemp.**—Emetic of mustard followed by large draughts of warm water; then strong tea or coffee. Arouse patient and keep him in motion.

**Iodine and Its Preparations.**—Give starch, white of eggs or flour mixed with water, emetic of mustard. Give strong tea or coffee, stimulants (whiskey, etc.), if needed, demulcent drinks.

**Lysol.**—Dilute alcohol or whiskey and albuminous substances, milk, white of eggs, etc.

**Nitro-Glycerine.** — Cold to head. Horizontal position. Give emetics and cathartics. Ergot.

**Nux Vomica, Its Preparations or Derivatives.**—Emetic of mustard followed by large draughts of warm water. Give powdered charcoal. To relieve spasms let patient inhale pure chloroform or give chloral hydrate (25 grains).

**Oil of Bitter Almonds, Essential.**—Cold water to head and spine. Give stimulants. Inhale ammonia.

**Phosphorus and Its Poisonous Derivatives.**—Emetic of mustard or blue vitriol 3 grains, every five minutes until vomiting occurs. A teaspoonful old thick oil of turpentine (avoid other oils), also epsom salts half ounce in tumblerful of water.

**Pennyroyal, Oil of.**—Give white of eggs or flour mixed with water, emetic of mustard. Give strong tea or coffee, stimulant (whiskey, etc.) if needed, demulcent drinks.

**Red Precipitate.**—Give white of eggs, flour or starch mixed with water, emetic of mustard. Give strong tea or coffee, stimulants (whiskey, etc.). If needed afterward, demulcent drinks.

**Rue, Oil of.**—Give white of eggs or flour mixed with water, emetic of mustard. Give strong tea or coffee, stimulants (whiskey, etc.); if needed, demulcent drinks.

**Savin, Oil of.**—Give white of eggs or flour mixed with water, emetic of mustard. Give strong tea or coffee, stimulants (whiskey, etc.); if needed, demulcent drinks.

**Santonine.**—Evacuate stomach; use stimulants and emetics.

**Strophanthus and Its Preparations.**—Give zinc sulphate and mustard as emetics. Also tannic acid. Stimulants (brandy or whiskey). Epsom salts.

**Strychnine.**—Emetic of mustard followed by large draughts of warm water. Give powdered charcoal. To relieve spasms let patient inhale pure chloroform or give chloral hydrate (25 grains).

**Sugar of Lead.**—Give Epsom salts (one-half ounce) dissolved in a tumbler of water, emetic of mustard, large draughts warm water, milk, demulcent drinks of flax-seed or slippery elm.

**Tansy, Oil of.**—Give white of eggs or flour mixed with water, emetic of mustard. Give strong tea or coffee, stimulants (whiskey, etc.); if needed, demulcent drinks.

**Tartar Emetic.**—Give emetic of mustard or zinc sulphate. Milk, white of eggs freely mixed with water.

**Veratrum Viride, Preparations and Derivatives.**—Emetic of mustard followed by large draughts of warm water. Then strong tea or coffee, stimulants (whiskey, etc.) freely. Keep patient in horizontal position, apply warmth to the extremities, artificial respiration.

**White Precipitate.**—Give white of eggs, flour or starch mixed with water, emetic of mustard. Give strong tea or coffee, stimulants (whiskey, etc.). If needed afterward, demulcent drinks.

**Wood Alcohol.**—Give warm water and salt (two teaspoonfuls to a tumblerful) immediately. Repeat at short intervals. Stimulate the respiratory movement, and give strong coffee.

**Yellow Jasmine.**—Coffee, brandy, emetic of ipecac or mustard.

**Zinc Sulphate.**—Give white of eggs, flour mixed with water, baking or washing soda, emetic of mustard. Give strong tea or coffee stimulants (whiskey, etc.). If needed, demulcent drinks.

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## ONE ON THE TOADSTOOL

"Dicky," said the teacher, "What is the meaning of the word 'diadem?' "

"Dunno," answered Dicky.

"A diadem is a distinguishing mark of royalty. Think you can remember that?"

"Yas'm, I guess so."

"Give me a sentence in which 'diadem' is used."

"I can't remember any, ma'am."

"Well, make one yourself."

"I'd druther not."

"Why, Dicky?"

"I don't think it's a nice word."

"But it is. It is a perfectly proper word. I am waiting for that sentence."

"Well then, 'If I eat toadstools I'll diadem sight sooner than if I let them alone."

And that is no lie.—**Commercial Traveler.**

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**Henpecked.**—In the cochineal family there is only one male to about 200 females, and when the mother increases her family she has about 1,000 at a time. What show is there for the old man in such a family as that? But then he has wings, which the women of the house have not, so he can fly away if they make home too hot for him.

## ADDITIONS AND CORRECTIONS U. S. PHARMACOPŒIA (8th Rev.)

### May 1st, 1907.

Since the passage of the National Food and Drugs Act, June 30, 1906, many communications have been received, embodying valuable emendations. The following list of those which have been approved by the Committee may be obtained by a purchaser of the U. S. P. 8th Revision, by sending to P. Blakiston's Son & Co., Philadelphia, a stamped and addressed return envelope.

Page **lvii**, insert

### ADDITIONAL NOTICES.

**Products and Preparations Made on a Large Scale.**—In the manufacture of products and preparations on the large scale, deviation from the official processes may be necessary, but the products must conform to the official requirements as determined by the tests of the U. S. Pharmacopœia, 8th Revision, and the finished preparation must be identical with those made by the official processes.

**Tests for Diluted Acids and Exsiccated Salts.**—Where a requirement is made in this Pharmacopœia in the official description, that a diluted acid "shall respond to the reactions and tests" given under the corresponding stronger acid, or where similar language is employed, it is understood that the diluted acid shall be brought to the strength of the stronger acid before testing, or that the quantities used in testing the diluted acid be so adjusted that it will conform to the same standards as those established for the stronger acid. In the description of dried or exsiccated salts, where similar language is employed, it is understood that the exsiccated salt, before testing, shall have the proper allowance made for the water it has lost during the process of exsiccation.

**Solubility Tests.**—In the solubility tests in this Pharmacopœia, slight mechanical impurities, fragments of filter paper, fibre and minute traces of allowable insoluble impurities, permitted by other tests for the same substance, but which interfere with the transparency of the solution, are not to be construed as vitiating the test for solubility.

Page **lxxi**, Col. 4, line 19 from bottom, change "0.35" to **"0.3"** Line 18, change "0.5" to **"0.45"** Line 11, change "0.55" to **"0.45."**

Page **lxxii**, Col. 4, line 26 from bottom, change "1.4" to **"1.0"** Line 24, change "0.5" to **"0.4"** Line 21, change "0.5" to **"0.4"** Line 16, change "1.75" to **"1.5"** Line 13, change "0.35" to **"0.25"** Line 9, change "2.0" to **"1.75"** Line 8, change "8.0" to **"7.0"** Line 7, change "1.5" to **"15"** Line 6, after "cent." insert **"of the total resin."** Tenth line from bottom, change "0.8" to **"0.08"** (if not already corrected).

Page **lxxiii**, Col. 4, line 23 from bottom, change "8" to **"6"** Line 20, change "5" to **"2.5"** Line 19, change "15" to **"10"** Line 8, change "0.35" to **"0.25"** Line 2, change "0.035" to **"0.03."**

Page **lxxiv**, Col. 4, line 18 from bottom, change "0.5" to **"0.04"**

Page **lxxv**, 11th line from bottom, change "0.25" to **"0.4"** and "0.125" to **"0.2"** and 3d line from bottom, change "1 Cc." to **"2 Cc."** (if not already corrected). Col. 4, line 15 from bottom, change "0.03" to **"0.025"**

Page **4**, line 26, insert **"about"** before "0.790" and in line 29, change "at 56.5° C. (133.7° F.)" to **from 56° to 57° C. (132.8° to 134.6° F.)"**

Page **8**, line 10, change "121.4° C. (250.5° F.)" to **"from 120° to 122° C. (248° to 251.6° F.)"**

Page **9**, lines 16, 17, and 18, change to **"The aqueous solution of the Acid (1 in 20) should not at once become more than slightly cloudy after the addition of barium chloride T.S. (limit of sulphates); nor immediately more than opalescent by the addition of silver nitrate T.S. with nitric acid (limit of chlorides); it should not be precipitated by ammonium oxalate T.S. (absence of calcium);"**

Page **10**, omit lines 24, 25 and 26; lines 33, 34 and 35, change to **"No. 121), omitting the subsequent addition of ammonia water."** Line 31, change "10" to **"20"**

Page **11**, line 4, change "83.7 parts" to **"from 83 to 86 parts"**

Page **12**, lines 23 and 24, change to **"Ten Cc. of the Acid should not be rendered more than slightly cloudy by the addition of 1 Cc. of barium chloride T.S. (limit of sulphuric acid)."** Line 28, change "1" to **"8.3"**

Page **13**, lines 14 and 15, replace by **"Ten Cc. of the Acid should not be rendered more than slightly cloudy by the addition of 1 Cc. of barium chloride T.S. (limit of sulphuric acid)."**

Page **16**, lines 3, 4, 5, 6 and 7, replace by **"If 10 Cc. of the Acid be neutralized with ammonia water, not more than a slight precipitate should result, and after filtering, the filtrate should not become turbid upon the addition of potassium sulphate T.S. (limit of barium)."**

Page **17**, line 13, change "10" to **"20"** Line 31, after "neutralization" insert **"at boiling temperature"**

Page **19**, line 6, change "*eighty*" to **"seventy-eight,"** and "780" to **"778"** (if not already corrected) Line 27, change "about 4° C. (39.2° F.)" to **"from 9° to 4° C. (48.2° to 39.2° F.)"** Line 34, change "the ordinary temperature" to **"25° C. (77° F.)"**

Page **20**, lines 35 and 36, omit "barium chloride T.S. (absence of *sulphuric acid*), or by" After line 40 add: **If 0.1 Cc. of the Acid be diluted with water to 7 Cc. and 1 Cc. of barium chloride T.S. be added, no cloudiness or precipitate should appear within 30 seconds (limit of sulphuric acid)."** Line 42, change "10 Cc. of a cold saturated solution of sodium chloride" to **"a cold saturated aqueous solution containing 5 Gm. of sodium chloride."**

Page **21**, line 9, change "potassium" to **"sodium"**

Page **23**, line 28, change "several minutes" to **"four hours"**

Page **25**, lines 42 and 43, to word "also" change to: **"Very soluble in water and alcohol at 25° C. (77° F.), and in boiling water and boiling alcohol;"** Line 48, change "0.2" to **"0.6"**

Page **26**, line 30, change "135° C. (275° F.)" to **"from 168° to 170° C. (334.4° to 338° F.)"** Line 38, change "remain unaffected" to **"show but a faint turbidity"** and "absence" to **"limit"** Line 46, change "10" to **"20"**

Page **28**, line 26, change "Hematoxylin" to **"Cochineal"** Line 36, change "10" to **"25"** Line 37, change "40" to **"25"** Line 46, change "hematoxylin" to **"cochineal"** Line 47, change "violet" to **"pink"** Lines 47 and 48, omit "the transition stages being as follows: first yellow, then green, finally passing into violet."

Page **31**, line 40, change "0.885" to **"0.895"** Line 41, change "7" to **"9"** Line 43, change "about 72° C. (161.6° F.)" to **"from 72° to 77° C. (161.6° to 170.6° F.)"**

Page **32**, line 46, change "0.918" to **"0.911 to 0.916"**

Page **36**, lines 25, 26 and 27, change to **"Aloin from Curacao Aloes is almost completely soluble in 120 parts of water, 15 parts of alcohol and 55 parts of acetone."** Omit lines 28 and 29 to the word "When"

Page **37**, line 9, change "0.065" to **"0.015"** and "65" to **"15"** and "1" to **"¼"** Lines 44 and 45, omit words after "alkali"

Page **38**, line 2, change "20" to **"150"**

Page **39**, line 13, after "acid" insert **"and 130 Cc. of water"** Line 46, change "10" to **"20"** and line 50, change "20" to **"150"**

Page **40**, line 9, change "25 parts" to **"28 parts"**

Page **41**, line 3, change "100" to **"150"**

Page **42**, line 11, change "2" to **"3"** and "50" to **"80"** Line 13, omit "completely" Line 31, change "more strongly heated, should be volatilized (absence" to **"ignited should yield not more than 0.0005 Gm. of non-volatile residue (limit"** Line 26, change "20" to **"150"**

Page **43**, line 21, change "100" to **"150"**

Page **45**, lines 20 and 21, omit sentence beginning "It boils"

Page **47**, line 7, after "(230° F.)" insert **"in a vacuum"** Line 32, change "Two Gm." to **"If 0.1 Gm."** and "when" to **"be"** and line 33 before "should" insert **"the solution"**

Page **49**, lines 4 and 5, omit "and melts at 263° C. (507° F.)."

Page **51**, lines 3, 4, 5, 6, 7, change to **"If 0.1 Cc. of tenth-normal potassium permanganate V.S. be added to 10 Cc. of ammonia water, which has been slightly supersaturated with diluted sulphuric acid, the pink color should not be completely destroyed within ten minutes (limit of really oxidizable substances)."**

Omit lines 8, 9 and 10, to the word "When" Lines 16 and 17, replace "be completely volatilized, leaving no residue on subsequent ignition" by **"afford a colorless residue which, on ignition, should be completely volatilized"** (if this correction has not been made).

Page **54,** line 25, change "0.075" to **"0.050"**

Page **56,** line 1, omit "to" and "1 Cc. of ammonia water be added and the mixture"

Page **58,** lines 17 and 18, change "no residue should be left (absence of *foreign salts*)" to **"not more than 0.1 per cent. of residue should remain (limit of foreign salts)."**

Page **59,** line 43, omit "and completely" and line 44, omit "or *chloride.*" After line 44 insert **"If 0.2 Gm. of the Oxide be dissolved in a mixture of 1 Cc. of nitric acid and 2 Cc. of distilled water, 10 Cc. of ammonia water added, and the liquid diluted to 60 Cc., then 10 Cc. of this solution should not immediately become cloudy upon the addition of 1 Cc. of nitric acid (limit of chloride)."**

Page **60,** line 38, change "has a yellow color, is neutral to litmus paper" to **"should be colorless to yellow"**

Page **62,** line 18, change "10" to **"15"**

Page **63,** omit lines 9, 10, 11 and 12 to "The" Line 12, change "The" to **"Atropine"**

Page **66,** line 39, change "0.35" to **"0.3"**

Page **67,** line 10, change "Hematoxylin" to **"Cochineal"** Line 37, change "hematoxylin" to **"cochineal"** Line 48, change "0.5" to **"0.45"**

Page **68,** line 47, change "phenolphthalein" to **"rosolic acid"**

Page **69,** line 4, change "phenolphthalein" to **"rosolic acid"**

Page **72,** line 28, change "58" to **"56"** and line 29, change "60" to **"58"** Lines 41 and 42, omit "and permanent in the air"

Page **73,** lines 6, 7, 8 and 9, replace by **"If 0.01 Gm. of the salt be mixed with 1 Cc. of water, 5 Cc. of sulphuric acid added, the mixture cooled and then 5 Cc. of ferrous sulphate T.S. carefully poured over it, without mixing, no red or brown zone should appear within 5 minutes (limit of nitrate)."** Line 23, change "0.58" to **"0.56"** and "0.6" to **"0.58"** Line 27, change "48" to **"46 per cent. nor more than 50."**

Page **74,** lines 4, 5, 6, and 7, replace by **"If 0.01 Gm. of the salt be dissolved in 1 Cc. of water, 5 Cc. of sulphuric acid added, the mixture cooled and then 5 Cc. of ferrous sulphate T.S. carefully poured over it, without mixing, no red or brown zone should appear within 5 minutes (limit of nitrate)."** Line 20, change "0.48" to **"0.46 Gm., nor more than "0.50"**

Page **75,** line 34, after "acid" insert **"and"** Change "added, and this mixture" to **"the mixture filtered, and the filtrate"**

Page **76,** line 34, change "64" to **"66"**

Page **77,** line 5, change "five minutes" to **"one minute"** and line 6 change "absence" to **"limit"** Line 14, change "0.2" to **"0.05"** and "0.3" to **"0.1"** Line 25, change "0.64" to **"0.66"** Line 47, change "a" after "produce" to **"more than a slight"** Line 48, change "absence" to **"limit"**

Page **78,** line 13, change "2.990 to 3.000 at 15° C. (59° F.)" to **"about 3.016 at 25° C. (77° F.)"** and after "Boiling point," insert **"about"**

Page **79,** line 13, insert before "Its" **"When dried at 100° C. (212° F.), to constant weight,"**

Page **81,** lines 2 and 3, change to **"Very soluble in water and alcohol."**

Page **82,** line 2, change "absence" to **"limit"** and line 33, change "absence" to **"limit"** Line 36, change "a trace" to **"0.1 per cent."**

Page **83,** lines 12, 13 and 14, change to **"The aqueous solution (1 in 20) yields with ammonium oxalate T.S. a white precipitate, insoluble in acetic acid, but soluble in hydrochloric acid. One Gm. of the salt dissolved in 20 Cc. of water, should not require the addition of more than 1 Cc. of tenth-normal potassium hydroxide V.S. to produce a pink color (phenolphthalein being used as indicator)."**

Page **84,** lines 15 and 16, change "Two Gm. of Calcium Phosphate" to **"Five Cc. of a solution (1 in 10) of Calcium Phosphate, in diluted hydrochloric acid"**

Page **86,** line 30, change "60" to **"55"**

Page **87,** line 8, change "2.08" to **"1.9"** Line 12, change "60" to **"55"**

Page **96,** line 18, change "0.938" to **"0.935"** and line 19, change "45°" to **"42°"** and "113°" to **"107.6°"**

Page **98,** line 39, after "Chloral" insert **"(1 in 20)"** Line 42, before "acidulated" insert **"slightly"** Omit lines 45, 46, 47, 48, 49.

Page **99,** line 5, change "glass-stoppered" to **"well-stoppered"** Line 24, change "twenty" to **"five"**

Page **102,** line 8, change "200" to **"400"** Line 9, change "125" to **"250"** change "25" to **"50"** Line 16, change "100" to **"200"**

Page **104,** line 43, before "solidify" insert **"partially"**

Page **105,** line 11, change "phenolphthalein" to **"rosolic acid"** Line 17, change "phenolphthalein" to **"rosolic acid"**

Page **106,** line 39, change "Hematoxylin" to **"Cochineal"**

Page **107,** line 16, change "hematoxylin" to **"cochineal"**

Page **109,** line 10, change "88" to **"120"** Line 48, before "crystallization" insert **"water of"**

Page **110,** line 40, change to **"Its aqueous solution (1 in 20) is neutral or faintly acid to litmus paper."**

Page **112,** line 9, change "0.55" to **"0.45"**

Page **113,** line 18, change "nitric" to **"hydrochloric"**

Page **117,** line 32, change "2.8" to **"3.2"** Line 35, change "4 drops" to **"1 drop"** and "1 Cc." to **"3 Cc."**

Page **118,** line 19, change "1.072" to **"1.078"** Line 49, and page **119,** lines 1 and 2, change to **"Two Cc. of Creosote should require not less than 10 Cc., nor more than 18 Cc. of normal sodium hydroxide V.S. to produce a clear, pale yellow liquid, which remains unclouded on diluting with 50 Cc. of water (absence of neutral oils)."**

Page **119,** line 19, change "1.032" to **"from 1.036 to 1.038"** and line 23, change to **"When distilled, 90 per cent. of the Cresol should boil between 195° and 205° C. (383° and 401° F.)."** Omit lines 27, 28 and 29.

Page **120,** line 43, after "evaporation" insert **"and ignition"**

Page **125,** line 29, change "Hematoxylin" to **"Cochineal"**

Page **126,** line 8, change "hematoxylin" to **"cochineal"**

Page **131,** line 18, change "0.925" to **"from 0.921 to 0.923"**

Page **132,** line 11, change "1.072 to 1.074" to **"from 1.066 to 1.068"**

Page **134,** line 12, change "Hematoxylin" to **"Cochineal"** Line 39, change "hematoxylin" to **"cochineal"**

Page **146,** line 32, after "Erlenmeyer flask" insert **"add a little more sand to the dish and, by rubbing, remove any adherent extract, which transfer to the flask."**

Page **148,** line 35, after "directed," insert **"The product must be multiplied by 50 instead of 20."** (If these words are not already there.)

Page **149,** line 8 and line 11, change "1.4" to **"1.0"**

Page **151,** lines 41, 42 and 43, and page **152,** lines 1 and 2, change to **"If 1.15 Gm. of Saccharated Ferrous Carbonate be dissolved in 10 Cc. of diluted sulphuric acid (1 to 5) and the solution diluted with water to about 100 Cc., it should require not less than 15 Cc. of tenth-normal potassium dichromate V.S. for complete oxidation, potassium ferricyanide T.S. being used as indicator (corresponding to not less than 15 per cent. of ferrous carbonate)."**

Page **154,** line 38, omit "slightly"

Page **155,** line 18, change "neutral" to **"acid"**

Page **161,** line 46, change "2" to **"8"** Line 47, change "1" to **"2"**

Page **163,** line 33, after "acid" insert **"in a test-flask (see page 522)"**

Page **164,** line 22, change "slowly add" to **"add a few drops of starch T.S., followed by"** Line 23, before "with" insert **"added slowly,"** and change "last trace of brown color" to **"blue or greenish color"**

Page **165,** line 26, change "Hematoxylin" to **"Cochineal"** Line 30, change "10" to **"25"** Line 31, change "40" to **"25"** Line 40, change "Hematoxylin" to **"cochineal"** Line 41, change "violet" to **"pink"** Lines 41 and 42, omit "the transition stages being as follows: first yellow, then green, finally passing into violet."

Page **168,** line 16, change "0.5" to **"0.4"** Line 25, change "Hematoxylin" to **"Cochineal"** Line 43, change "hematoxylin" to **"cochineal"**

Page **174,** line 48, change "120° C. (248° F.)" to **"110° C. (230° F.)"**

Page **175,** line 36, change "Hematoxylin" to **"Cochineal"**

Page **176,** line 14, change "hematoxylin" to **"cochineal"** Line 45, change "0.5" to read **"0.4"**

Page **191,** line 39, change "1.75" to **"1.5"**

Page **192,** line 8, change "Hematoxylin" to **"Cochineal"** Line 11, after "V.S." insert **"and 20 Cc. of distilled water"** Line 25, change "hematoxylin" to **"cochineal"** Lines 26 and 27, change "to just cause the yellow color of the solution to turn purple" to **"until a pink color is produced"**

Page **200,** line 17, change "5 Cc." to **"8 Cc."** (if not already corrected).

Page **208,** line 23, change "Diluted alcohol" to **"menstruum"** Line 27, after "adding" insert **"first the remainder of the menstruum and then"**

Page **214,** line 18, change "0.35" to **"0.25"**

Page **229,** line 36, change "1.140" to **"from 1.110 to 1.114"** Line 43 before "Turbidity" insert **"Permanent"**

Page **230,** line 1, change "2 Cc. of sodium hydroxide T.S." to **"2 Cc. of potassium hydroxide solution (15 per cent.)"** Line 2, insert **"nearly"** before "white mass." Insert **"Much"** before "Coloration" Line 3, omit "white" Omit lines 6, 7 and 8.

Page **235,** line 51, after "evaporation" insert **"and gentle ignition"**

Page **237,** line 29, change "99.5" to **"98.5"**

Page **238,** line 10, change "no appreciable" to **"not more than 0.05 per cent. of"**

Page **239,** lines 31 and 32, change the words after "readily" to **"soluble in diluted nitric acid, forming a clear solution, or in hydrochloric acid (1 in 10) with faint opalescence."**

Page **242,** lines 5, 6 and 7, change to **"If 0.1 Gm. of the powder be digested with 20 Cc. of warm diluted hydrochloric acid, the filtrate should not be affected by hydrogen sulphide T.S. (limit of mercuric oxide)."**

Page **244,** line 33, change "179.7° C. (355.5° F.)" to **"from 191° to 192° C. (375.8° to 377.6° F.)"**

Page **245,** line 1, change "no" to **"but a faint yellow"** Lines 12, 13 and 14, change to **"White prismatic crystals having an acrid, nauseous, and bitter taste; deliquescent on exposure to the air."** Line 35, change "no" to **"but a faint yellow"**

Page **248,** line 39, change "0.1" to **"0.2"**

Page **250,** line 25, change "2" to **"1.75"** Line 47, change "Hematoxylin" to **"Cochineal"**

Page **251,** line 28, change "hematoxylin" to **"cochineal"** Line 36, change "8" to **"7"** Lines 36 and 37, change "but not more than 1.5 per cent. of resin" to **"of which not more than 15 per cent. should be"**

Page **262,** line 10, change "about 1.315" to **"from 1.280 to 1.290"**

Page **265,** line 3, change "about 1.432" to **"from 1.430 to 1.450"** Line 32, change "cool" to **"moderately warm"** Line 35, change "1.075 to 1.078" to **"from 1.075 to 1.081"** Lines 54 and 55, change the words after "ignition" to **"should leave not more than 0.05 per cent. of residue (limit of fixed impurities)."**

Page **266,** line 3, change "0.5" to "1." Line 4, change "0.1" to **"0.2"** Line 18, change "ten" to **"thirty"**

Page **274,** line 38, change "absence" to **"limit"**

Page **275,** line 30, change "absence" to **"limit"**

Page **276,** line 7, change "absence" to **"limit"** Line 37, change "is neutral" to **"(1 in 20) is faintly alkaline"** Line 48, insert **"other" before** *"alkalies."* Line 53, omit "anhydrous" After "Citrate" insert **"dried at 150° C. (302° F.)"**

Page **277,** line 8, change "absence" to **"limit"**

Page **278,** line 1, change "slightly reddens blue" to **"(1 in 20) should be neutral or slightly acid to"** Line 32, change "absence" to **"limit."**

Page **279,** line 40, change "0.001" to **"0.01"**

Page **280,** line 7, after "acid" insert **"and 130 Cc. of water"** and line 50, after "acid" insert **"and 100 Cc. of water"** Line 40, change "0.005" to **"0.04"**

Page **281,** line 28, change "0.85" to **"1.1"**

Page **284,** line 12, change "neutral" to **"acid"**

Page **285,** line 12, change "20" to **"100"** and line 14, change "absence" to **"limit"**

Page **288,** line 34, omit *"Average dose.*—4 Cc. (1 fluidrachm)," (if not already omitted).

Page **289,** line 4, omit the words, *"Average dose.* 4 Cc. (1 fluidrachm)." (if not already omitted).

Page **291,** lines 2, 3, 4 and 5, omit "a bulky, white, crystalline precipitate will be produced; then if the test-tube, loosely corked, be allowed to stand in boiling water for about five minutes, with occasional agitation, the precipitate should dissolve and form" Line 6, after "solution" insert **"should result"**

Page **294,** line 5, after "heated" insert **"slowly"** change "then" to **"when heated rapidly it"** Line 40, omit "colorless"

Page **296,** line 3, omit "and the remaining two at 130° C. (266° F.)"

Page **307,** line 49, change "0.985" to **"0.988"**

Page **308,** line 1, after "being" insert **"up to"**

Page **310,** line 13, change "0.905 to 0.915" to **"0.900 to 0.910"**

Page **311,** omit lines 12, 13, 14 and 15.

Page **312,** omit line 17.

Page **313,** line 13, change "about + 50°" to **"not below + 45°"**

Page **314,** line 19, change "—5° C. (23° F.)" to **"—3° C. (26.6° F.)"**

Page **316,** omit line 5; line 14, change "0.880 to 0.892" to **"0.875 to 0.910"** Line 28, change "+ 60°" to **"+ 58°"** Line 35, change "phenolphthalein" to **"rosolic acid"** Line 41, change "phenolphthalein" to **"rosolic acid"**

Page **317,** line 41, change "8" to **"6"**

Page **318,** line 5, change "—25°" to **"—20°"**

Page **321,** line 45, change "180" to **"183"**

Page **322,** line 4, change "86" to **"84"** Line 45, change "5" to **"2.5"** Line 46, change "15" to **"10"**

Page **325,** omit lines 6 and 7.

Page **328,** line 25, change "212 to 218" to **"203 to 215"** and line 31, change "102" to **"103"** and line 32, change "105" to **"109"**

Page **329,** line 41, change "six" to **"sixteen"** and omit "or over night"

Page **331,** line 9, after "percentage" insert **"powdered sugar of milk or acacia"** Line 35, after "test-tube" insert **"diluted with three times its volume of water,"** and line 42, change "120" to **"200"**

Page **332,** line 5, change "2" to **"4"**

Page **333,** line 2, change "123° C." to **"121° C."** and line 3, change "253.4°" to **"249.8°"**

Page **336,** omit lines 14, 15, 16 and 17.

Page **337,** line 23, change "40° C. (104° F.)" to **"39° C. (102.2° F.)"** Lines 24 and 25, change to **"Phenol should have a boiling point from 178° to 182° C. (352.4° to 359.6° F.)."** Line 33, omit "which is permanent"

Page **351,** line 18, omit "0.1 Gm. of " Line 42, change "soluble in" to **"miscible with"** and omit "of solutions of potassium or sodium hydroxide"

Page **352,** lines 31 and 32, change the words after "not" to **"upon the addition of ammonia water yield more than a slight precipitate (limit of zinc and iron)."** and lines 33 and 34, change "should leave no residue (absence" to **"should not leave more than a slight residue after gentle ignition (limit"**

Page **353,** line 46, after "salt" insert **"(1 in 10)"** and lines 48, 49 and 50, change after "not" to **"yield more than a slight precipitate upon the addition of ammonia water (limit of zinc and iron)."** and line 52, change "a weighable residue" to **"more than a slight residue after gentle ignition"**

Page **363,** line 19, after "white" insert **"or nearly white"**

Page **364,** between lines 18 and 19, insert **"One Gm. of the dried salt, dissolved in about 10 Cc. of water should not require more than 1.5 Cc. of tenth-normal hydrochloric acid V.S. for neutralization (methyl orange T.S. being used as indicator)."**

Page **367,** lines 11, 12, 13 and 14, change to **"If 0.1 Gm. of Potassium Permanganate be dissolved in 100 Cc. of distilled water, to which 1 Cc. of sulphuric acid and 35 Cc. of tenth-normal oxalic acid V.S. have been previously added, then the addition of not more than 3.5 Cc. of tenth-normal potassium permanganate**

**V.S. should be required to impart a permanent pink tint."**

Page **378,** lines 16 to 30, change the "Test for Other Cinchona Alkaloids" to read **"Dry Quinine Sulphate at 50° C. (122° F.) for two hours. If 1.8 Gm. of this Dry Quinine Sulphate (which should be neutral or slightly alkaline to test paper) be agitated with 20 Cc. of water at 65° C. (149° F.) for half an hour, then allowed to cool to 15° C. (59° F.) and be macerated at this temperature for two hours, with occasional shaking of the test-tube, the liquid filtered through filter paper of 8 to 10 Cm. diameter, then if 5 Cc. of the filtrate be transferred to a test-tube, and gently mixed (without shaking) with 7 Cc. of ammonia water which must be of official strength, have a temperature of 15° C. (59° F.) and be all added at once, a clear liquid should be produced.**

**If the temperature during the maceration has been 16° C. (60.8° F.) 7.5 Cc. of ammonia water may be added. If 17° C. (62.8° F.), 8 Cc. may be added (limit of allowable foreign cinchona alkaloids)."**

Page **379,** line 20, change "10" to **"15"**

Page **381,** omit lines 16 and 17. Line 34, change "119° C." to **"from 109° to 111° C."** and "(246.2° F.) to **"(228.2° to 231.8° F.)**

Page **385,** lines 9, 10, 11 and 12, change to **"If 1 Gm. of Sugar of Milk be digested for half an hour with 10 Cc. of diluted alcohol, with occasional shaking, and the liquid filtered, the filtrate should remain clear after admixture with an equal volume of absolute alcohol, and this liquid, if evaporated on a water-bath, should leave not more than 0.03 Gm. of residue (absence of cane sugar)."** Line 13, change "10" to **"20"**

Page **397,** line 17, change "36.9" to **"36.5"**

Page **398,** line 36, change "20.4" to **"17"**

Page **402,** lines 36 and 37, to the word "and" change to **"Dry, white or nearly white flakes, powder, fused masses or translucent or opaque white pencils, odorless"**

Page **403,** between line 37 and line 38, insert **"One Gm. of the dried salt, dissolved in about 10 Cc. of water, should not require more than 1.5 Cc. of tenth-normal hydrochloric acid V.S. for neutralization (methyl-orange T.S. being use as indicator)."**

Page **405,** line 42, after "white" insert **"or nearly white"**

Page **407,** lines 24 and 25, change to **"Not more than a slight turbidity should appear on dissolving 1 Gm. of the salt in 20 Cc. of water (limit of calcium, aluminum, etc.)."**

Page **408,** line 23, after "and" insert **"which after allowance is made for the loss of 60.3 per cent. of water of crystallization,"**

Page **410,** line 38, change "96" to **"94"**

Page **411,** lines 17 and 18, change "the solution allowed to stand for about an hour, and shaken at frequent intervals, not more than 11.65 Cc. of tenth-" to **"and after solution has taken place, not more than 12.45 Cc. of tenth-"**

Page **415,** line 3, change "the original" to **"one-tenth the,"** and line 4, after "Ether" insert **"taken"**

Page **421,** omit lines 21, 22, 23 and 24.

Page **422,** line 5, change "0.35" to **"0.25"** Line 23, insert after "very deliquescent" **"and also occasionally efflorescent"**

Page **423,** line 21, after "plates" insert **"or white granular powder, or crystalline crusts"**

Page **426,** line 29, change "should not produce more than a faintly pink color" to **"may produce a yellow but not a red or reddish color"**

Page **427,** line 11, change "should not produce more than a faintly yellow color," to **"may produce a yellow but not a red or reddish color"** Line 43, change "should not produce more than a faintly yellow color" to **"may produce a yellow but not a red or reddish color"**

Page **428,** line 7, change "70" to **"60"** and line 9, change "insoluble" to **"partially soluble"**

Page **429,** line 3, after "crystals" insert **"or crystalline powder"**

Page **439,** line 37, after "green" insert **"or yellowish green"** Line 38, change "a neutral" to **"an acid"**

Page **441,** line 24, omit *"and fifty"*

Page **450,** line 30, change "about 0.850" to **"from 0.860 to 0.865"** Line 33, change "155° to 165° C. (311° to 329° F.) to **"160° to 170° C. (320° to 338 F.)"** Line 40, omit "very"

Page **452,** line 38, before "45" insert **"when dried over sulphuric acid"**

Page **453,** line 5, change "0.5" to **"0.1"** and "10" to **"20"** Line 7, change "(absence of *iodides*)" to **"(limit of halogen salts)"**

Page **457,** line 4, change "0.035" to **"0.03"**

Page **464,** line 2, change "0.05" to **"0.04"**

Page **482,** line 5, change "0.03" to **"0.025"**

Page **483,** line 1, change *"nine"* to **"eight"**

Page **506,** line 9, after "white" insert **"or nearly white"**

Page **507,** line 36, after "white" insert **"or nearly white"**

Page **508,** line 25, after "white" insert **"or nearly white"**

Page **509,** line 13, change "99.5" to **"99"** and line 46, change "5.4" to **"5.5"** and line 48, change "4" to **"4.04"** Omit the word "about"

Page **510,** line 45, change "15.5" to **"13.5"**

Page **512,** line 25, change "remain clear" to **"show but a faint cloudiness"** (if not already corrected).

Page **539,** line 23, insert after "(1 in 20)" asterisk for the following foot-note: **"*The dilution (1 in 20) has been extended, except as stated below, by the Committee of Revision to a total dilution of 1 in 100; for iron the total dilution is extended to 1 in 300. Exception: For chemical substances to be tested for antimony, and arsenic, the dilution has not been extended, but remains at 1 in 20."** Line 37, after "viewed" insert **"crosswise"**

Page **544,** after line 15, insert **"131a. Rosolic Acid Test Solution. Dissolve 1 Gm. of commercial rosolic acid (chiefly methylaurin, $C_{20}H_{16}O_3$) in 10 Cc. of diluted alcohol, and add enough water to make 100 Cc. Of this solution about 0.5 Cc. is used for 100 Cc. of solution to be titrated. Ammoniacal solutions should be highly diluted when titrated with this indicator. In place of rosolic acid, commercial pæonin (aurin R) may be employed. This indicator gives a yellow color with acids and violet-red with alkalies."**

Page **569,** Col. 4 (Indicator) 4th line from bottom, change "Hematoxylin" to **"Cochineal"** and also wherever it occurs in this table.

Page **570,** Col. 5, line 14 from bottom, change "0.35" to **"0.3"** Line 13, change "0.5" to **"0.45"**

Page **571,** Col. 5, line 31 from bottom, change "1.4" to **"1.0"** Col. 3, line 30, change "$KMnO_4$" to **"$K_2Cr_2O_7$"** and Col. 4, line 30, insert **"$K_3Fe(CN)_6$"** Col. 5, line 14, change "0.5" to **"0.4"** Line 8, change "1.75" to **"1.5"**

Page **572,** Col. 5, line 27 from bottom, change "0.35" to **"0.25"** Line 23, change "2.0" to **"1.75"**

Page **573**, Col. 5, line 23 from bottom, change "8.0" to **"6.0"** Line 21, change "5.0" to **"2.5"** Line 20, change "15.0" to **"10.0"**

Page **574,** Col. 3, line 14 from bottom, change "38.35" to **"37.55"** Col. 5, line 14, change "96.0" to **"94.0"** Line 4, change "0.035" to **"0.03"**

Page **575.** Col. 3, line 3 from bottom, change "24.6" to **"24.5"** Col. 5, line 9, change "0.03" to **"0.025"** Line 3, change "99.5" to **"99.0"**

Page **579,** line 17, after "solvent" insert asterisk for the following foot-note: ***If extraction is incomplete, the processes must be repeated with additional solvent. The completion of the "shaking out" processes may be tested by evaporating a small portion of the solution, dissolving the residue in acidulated water and adding mercuric potassium iodide T.S., when the absence of turbidity indicates exhaustion.** Line 36, after "not" insert **"strongly"** Line 37, before "hematoxylin" insert **"either"**

Page **603,** above the 19th line from bottom insert ***"In the alcohol tables the words 'abs. alc.' (absolute alcohol), mean 100 per cent. alcohol, not the official (99 per cent.) absolute alcohol."**

Page **605,** 9th line from bottom, 1st column, change "official" to **"absolute"** and 5th column "absolute" to **"official"**

**NOTE.—If between May 1st, 1907, and June 1st, 1907, the Committee of Revision make any further additions or corrections than those printed above, a supplementary list will be prepared, which will be mailed if the purchaser sends to P. Blakiston's Son & Co., Philadelphia, a stamped addressed return envelope.**

## BOOK NOTICES AND REVIEWS

**A Text-Book of Botany and Pharmacognosy.** Intended for the use of students of pharmacy, as a reference book for pharmacists, and as a handbook for food and drug analysts. By Henry Kraemer, Ph.B., Ph.D., Professor of Botany and Pharmacognosy, and Director of the Microscopical Laboratory in the Philadelphia College of Pharmacy. Second revised and enlarged edition. With 321 plates, embodying upwards of 1,500 figures. Octavo, 840 pages. Cloth, $5 net. **Philadelphia: J. B. Lippincott Company.**

The title of this book would probably not attract one person in a thousand. Yet the first time we looked into it for the purpose of forming an opinion upon its merits as a text-book for students in pharmacy, we found ourselves burning the midnight oil, and only the physical necessity of seeking "tired nature's sweet restorer, balmy sleep," sufficed to draw us away from it. Of course, there is a good deal in this work that is dry to the student who does not really "want to know," as there is in all books on botany and pharmacognosy. But there is so much that is instructive, and it is so clearly presented that the real **student** will find satisfaction in its use.

About one-half of the work is devoted to botany, and nearly as much to pharmacognosy. After a lucid exposition of the principal groups of plants and the "Outer Morphology of Angiosperms," comes a most interesting chapter on the "Inner Morphology of the Higher Plants." This deals with the cell and its contents, different kinds of cells, the inner structure of organs of plants, and a few pages on plant metabolism. This chapter gives in a somewhat condensed form the mode of development of cells, cell contents, tissues and organs of plants, and accounts for the production of many secretions of great interest to pharmacy, such as starch, gum, inulin, mucilage, sugars, glucosides, alkaloids, coloring matter, tannins, oils, resins, enzymes, etc. So far as it deals with the structure of organs, it is a necessary preparation for the study of drugs in the dried condition.

The second part, Pharmacognosy, will be of value to many who have but little interest in botany. It deals with crude drugs and powdered drugs and foods. While the treatment of this part of the subject is similar to that of other authors, the portion relating to the constituents of drugs is more explicit and definite. For the use of our students in pharmacy, we wish the author had made more mention of certain inactive, inert, or antagonistic principles, as well as those believed to be the medicinal ones. For instance, in Nux Vomica no mention is made of the fatty body which gives trouble in making some preparations. In Senna, no mention is made of the gum which interferes with percolating the powdered drug with a watery menstruum, or of the volatile oil and resin which give it most of its nauseating and griping qualities. There are a number of drugs that contain constituents which are more or less of an impediment to the pharmacist, whose attention should be called to their presence in a treatise on pharmacognosy.

In addition to such matter as is to be found in other works on Pharmacognosy, there is all through the second part much valuable information for the use of analysts investigating drug and food adulterations. This will cause this work to be used largely as a reference book by such persons. Professor Kraemer's work in this department is well known to be reliable, and hence his treatise will soon become a recognized authority.

The illustrations and figures (nearly 2,000 in all), chiefly we are told from the author's own drawings and photographs, are beautifully executed and greatly illuminate the text. These will be of much value in the microscopic examination of drugs.

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**Saunders' Pocket Medical Formulary.** By William M. Powell, M. D. Containing 1831 formulas from the best known authorities. With an appendix containing Posologic Tables, Formulas and Doses for Hypodermic Medication, Poisons and their antidotes, Diameters of the Female Pelvis and Fetal Head, Obstetric Table, Dietlists, Materials and Drugs used in Antiseptic Surgery, Treatment of Asphyxia from Drowning, Surgical Remembrancer, Table of Incompatibles, Eruptive Fevers, etc. Eighth Edition, Adapted to the New (1905) Pharmacopeia. 1906. In flexible morocco, with side index, wallet and flap. $1.75 net. **W. B. Saunders Company, Philadelphia and London.**

This volume is primarily for the medical profession, but it contains much information that might be of interest and value to the pharmacist. It is very carefully prepared and contains a number of excellent formulas selected from leading medical works. There are blank pages upon which additional formulas can be inserted.

It is to be regretted that physicians so often find it necessary to use a book of this kind to facilitate the writing of prescriptions. However, if it is necessary, this little work can be cheerfully recommended. It contains a large number of tables of various kinds that are unquestionably valuable for reference.

**The American Pocket Medical Dictionary.** Edited by W. A. Newman Dorland, M. D. Fifth revised edition, 32mo, of 574 pages. Philadelphia and London. **W. B. Saunders Company, 1906.** Flexible morocco, gold edges, $1 net; thumb indexed, $1.25 net.

This is a neat little volume and carefully prepared, as are all the publications of Saunders & Co. It makes a very desirable ready reference book, containing much information on materia medica, therapeutics and anatomy, of interest to the pharmacist and medical man.

The size makes it very convenient. The definitions are short, but clear and strictly to the point. This makes it the more valuable to the busy pharmacist, who may occasionally find it necessary to refresh his memory upon some technical term.

In addition to the dictionary proper there are a number of tables of materia medica, posology, etc., that will be of value to the pharmacist in his everyday work.

Mr. D. R. Rees, '92, has moved into a very attractive store on Laguna street, near Hayes. Messrs. Rees and Creighton were formerly the owners of the Hayes Valley Pharmacy.

E. M. Fowler, '00, is the manager of one of Lengfeld's stores.

## WHOLESALE DRUG HOUSE BURNED OUT

The wholesale drug store of Archer & Schanz, of Portland, Ore., was completely destroyed by fire on the morning of July 1, entailing a loss of $150,000. The fire is supposed to have originated in spontaneous combustion on the third floor, where it had been smouldering for several hours before it was discovered, and was one of the fiercest and most spectacular that Portland has experienced. It was only by the most valiant work on the part of the fire department that it was confined to the building in which it began.

The firm of Archer & Schanz have had a double baptism of fire, the first being in San Francisco in the general conflagration of April, 1906, when their entire stock of chemicals, surgical instruments, etc., was burnt up. But they showed their pluck by taking steps to resume business at once by seeking temporary quarters before the embers of their second fire were cold. Such enterprise is sure to win. We understand the firm was fully insured.

## Some Serial-Numbering Contracts Stand

The Indianapolis injunction does not affect direct contracts secured by serial numbering price-protective manufacturers, when the signatures to the contracts were procured by the manufacturer without the assistance of other manufacturers or jobbers, and retailers acting for others than themselves.

An example of this class of manufacturers is the U. S. Pharmacal Co., of Chicago. This company adopted and put into effect a D. C. S. N. plan of its own before the N. A. R. D. was born.

# Drug News

### The Ten Hours Drug Law

There has been some friction in carrying out the Ten Hour Drug Clerk Law at Los Angeles. Some of the proprietors object to the strict enforcement of the law if, at the same time, the Drug Clerks' Salary Law (made by the Drug Clerk's Union, not by the Legislature) is to be enforced. Proprietors say if the hours are shortened the pay must also be shortened, and the clerks object. The State Labor Commissioner is charged with the execution of this law. If he should push matters, the employers will have to yield so far as hours of service are concerned, but they stoutly insist that they will reduce salaries in proportion, and this has not yet been made a subject of legislative action.

We suggest a little moderation on both sides. The men who consult their employers' interests usually do the best in the long run, and the employers who treat their employes the best generally get the best service. There are exceptions, of course, but in the main, mutual consideration **pays.** But it must be mutual. Now let us have peace.

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### OREGON STATE PHARMACEUTICAL ASSOCIATION

The annual meeting of the O. S. P. A. will be held at Seaside, Oregon, this week (July 9 to 12). An unusually large attendance is expected. The committee of arrangements have done good work and engaged ample accommodations for all who go. Let every one turn out that can. Leave business for a few days and have a good time, while getting and giving "pointers on pharmacy."

### Drug Stores Closed by a Strike

We noted last month that the drug stores of Butte, Mont., were all closed by a strike on the part of the clerks for more wages. The stores remained closed for several days for all business except prescriptions and emergency calls, which the proprietors attended to themselves. We have not heard the outcome of the controversy. Clerks (registered) demanded $125 a month and assistants $80.

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### Shorter Hours for Sundays

For seven months, Bowman & Co., who own four drug stores in Oakland and one in Berkeley, have closed their stores on Sundays, except between 9 a. m. and 2 p. m. They claim they have lost little or none of their regular patronage, while they have gained some customers who sympathize with their efforts to give their employes a larger share of the benefits of the rest day provided from time immemorial for the sons of toil.

Bowman & Co. have a very large prescription trade, and also a heavy trade in sundries and "notions." The latter would suffer most by such a move, because one clerk remains in the store during the closed hours to dispense prescriptions. Thousands of persons pass their stores on Sundays during that time, and of these a certain number would drop in and make purchases. This business they have lost. Whether they have made enough in other ways to make it up is doubtful. Perhaps they have, and more too. But this question should not be determined by the items of profit or loss, but by a higher consideration. Is it right? Is it best?

An opinion was rendered today from the office of the Attorney-General of the State of Washington, to W. P. Bonney, of Tacoma, secretary of the Washington State Pharmacy Association, that under the new pure food law, labels must show the proportions of alcohol, morphine, etc., on compounds made upon a physician's prescription and that the new state law requiring a $25 annual state liquor license applies to a druggist who sells liquors as well as to saloons.

Redding drug stores must pay $40 a quarter to the city for a license to sell liquor, or else they must quit selling liquors at wholesale or retail. Saloons pay $40 a quarter for a retail license. The city council have unanimously adopted an ordinance requiring drug stores to take out a license. The druggists declare that they will not take out licenses and they will continue to sell liquors to such customers as ask them for medicinal purposes whether they have a physician's prescription or not.

It has been discovered by the chief of police of Bellingham, Wash., that unless druggists sell whiskey by the glass to the trade that they cannot be compelled to pay a retail liquor license to the city. In other words the druggists may sell in any sized bottles they want to and escape any penalty. Anxious to execute the law and do the bidding of the mayor that all drug stores selling liquor shall be compelled to pay a license to the city or be arrested, Chief of Police Thomas recently sought to purchase drinks of whiskey from certain druggists, but they refused. The chief has carefully read the license which the State gives the graduate druggist to sell drugs and he finds therein that they can, by the privileges it affords, sell liquor in packages, and if the purchaser signs a statement that it is for medicinal purposes the druggist is clearly within the law. Only when they sell liquor by the glass without a license can they be arrested.

## IDAHO BOARD OF PHARMACY

This board meets twice a year. The next meeting will be held at Coeur d'Alene City on July 15, 1907.

W. M. Crilly, well known all over the State, has taken charge of the Rossville drug store.

The new Prosser-Young drug store, which was recently opened in Alameda, is evidently taking that enterprising town by surprise, and there is good reason for it, as a more inviting drug store would be hard to find. The entire interior of the store is finished in Flemish oak, the outside walls, beamed ceiling, mezzanine floor, upper railings and other portions of the fancy woodwork are all finished in a dainty green. The new store is in charge of Mr. E. McKinlay, who for five years was in charge of one of the Osgood stores in Oakland, and his assistant is B. D. Brown, formerly with Off & Vaughan Drug Co., of Los Angeles.

Mr. William McKay Stewart, of the Saint Rose Drug Store, Santa Rosa, is going to have one of the prettiest stores north of San Francisco. He is making a great many changes with that end in view.

Mr. Skillman, of San Fernando, generally called "Doctor," is making a number of improvements in his store; another evidence of prosperity.

Grunsfelds Bros., of Albuquerque, New Mexico, have sold their drug departments to Gross-Kelly Co., who will make considerable improvements and additions to the already large establishment.

Mr. John P. Stiegel, from Waterloo, Iowa, has decided to locate in Phœnix, Arizona, and has accepted a position with the Bear Drug Store.

The Viole-McLain Drug Company, of Los Angeles, was recently incorporated with a capital stock of $75,000, by Geo. H. McLain, Jules Viole, and John Lopizich.

The Bergman Chemical Co. was recently incorporated with a capital stock of $10,000.

The Arrowhead Drug Company has just been incorporated by T. J. Davis, C. E. Thurston, E. F. Munsey, R. C. Conant, and J. F. Phillips, with a capital stock of $25,000.

Mr. Gratz Barnes, of Cole & Barnes, Highlands, was married to Miss Caroline Thompson, of that city.

The Gerard & McCormack Drug Company are refitting and enlarging their store at 1418 Market Street, and when completed with have one of the most attractive stores in the city. With Tom Logie to look after the wants of the trade, success is assured them.

F. S. Malone, of San Rafael, is spreading out. He has just purchased Dr. Crow's drug store at San Anselmo, and intends to enlarge it. Good luck.

The Sun Drug Company, of Los Angeles, secured the contract to furnish the County Farm and Detention Home with drugs.

Scofield & Turley have purchased the stock of W. S. Nicoll, of Bend, Oregon, and will continue in the old location.

Without doubt the handsomest and costliest drug store in the State is being fitted up by the Moore Drug Company at the corner of Sacramento and Kearny Streets, this city, a complete description of which will appear in our August issue. Mr. F. W. Moore was formerly located in Eureka.

S. F. Dignan, formerly with his father in Sacramento, is now with Edwin Val Schmidt.

From all reports, Tucson, Arizona, can boast of as fine a lot of drug stores as there are in the entire West. Special mention must be made of the drug stores owned by Mr. Fred Fleishman, Mr. E. Bell, and Mr. Geo. Martin. It is hard to determine which is the most complete, as there is a good-natured rivalry existing among them down there to outdo one another.

Dunn & Loomis, the Clifton, Arizona, druggists, are doing an enormous business, so much so that they have had to increase the size of their store, and are putting in some very handsome fixtures, in addition to a beautiful soda fountain.

Captain Bernard Ruppe, the president of the New Mexico Board of Pharmacy, presided at the recent session of the Board of Pharmacy, which was held at Roswell, New Mexico, at which time thirteen applicants passed the examinations.

B. K. Bowerman, now located at the corner of Devisadero and Turk Streets, is up against it. His business is increasing so rapidly that he can't find room to accommodate it; he can't build, up, he can't build on either side, neither can he build in front, so he is now figuring on building a tunnel in the side of the hill containing 24,683⅓ feet, marble lined, electric lighted, steam heated, compressed air pump to furnish air (no, not hot) and a lot of other fixings. And then he woke up.

F. A. Hunter, formerly of Alameda, is now farming near Redwin, Mendocino County, and he is making a huge success of it. First thing we know he will be raising medicinal plants and becoming a bloated millionaire.

J. H. Williams, formerly of the Preston School of Industry of Ione, has bought out E. G. Ennick of that place and is making a number of improvements in the store.

The little town of Concord can boast of as modern a drug store as can be found in any large city, and is managed by Mr. O. D. Clough, formerly of Black Diamond.

Alameda is certainly coming to the front in the drug store line. It will be very hard to find so many strictly first-class and up-to-date drug stores in any town of its size in the United States. The latest addition is the store opened by George M. Sutherland, which speaks well for his enterprise and artistic taste. "Success comes to those that strive for it."

Miss Laura A. McCord is chief clerk at P. Flato's, Alameda. No wonder Flato's business is increasing!

Chaulmoogra Compound is compounding the interest of Neideker. He reports doing a big business with it, receiving orders even from Montana. Well, he deserves it.

A. J. Fouch, class of '02, is doing a big business at Maxwell. He has just completed one of the daintiest of homes, and is now moving in. Success to you, A. J.

Miss M. B. Nolan, secretary of the Women's Pharmaceutical Association, is now manager of La Stella Di Italia.

A fire, caused by the ignition of some asthma remedy which was being dried, broke out in the basement of Bowman & Co.'s new store on Broadway, Oakland, on July 1, threatening to do serious damage; but by the immediate use of a couple of chemical fire extinguishers the fire was extinguished before the fire department arrived.

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Mr. Frank Zerr, formerly with Sale & Son, Los Angeles, has purchased the Glendale Pharmacy of W. A. Morton at Glendale, Cal. Mr. Zerr will carry as complete a line of drugs and medicines as can be found in Los Angeles.

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The Hornung Drug Company recently opened their new store in Marysville, and it's a dandy, one of the prettiest in Northern California. The firm is to be commended for their enterprise.

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Claude Moomau, of Santa Ana, has accepted a position with a San Francisco firm.

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Val Schmidt, the veteran druggist of this city, is going back to the old stand in the burned district. There's grit for you—but it is of such stuff the old pioneers are made.

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It will pay one to take a trip up to Point Richmond to see Ferguson's new store and soda fountain. They are both "peaches," and will, no doubt, draw well. E. M. is doing the main stunts there.

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Charles E. Neidecker, formerly of Darrough & Co., of Redding, has bought an interest in the Laing Drug Company, Richmond. That ought to make a great combination.

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Charles J. Stover bought out the Schoen Drug Store in Richmond, and contemplates making improvements which will make it one of the most attractive stores north of San Francisco. Keep your eyes on Chas. J.

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Dr. Charles R. Blake is doing a splendid business in his drug store in Atchison. The doctor is celebrated in that part of the State for his courtesy. The big business he is doing is the result.

T. S. Malone and the Wolff Drug Co., of San Rafael, and the Ing-Allee Drug Co., of Sacramento, were awarded the contract to supply San Quentin.

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J. E. Sangster, the prosperous Oroville druggist, is contemplating enlarging his store. Glad to hear it and hope he will continue to expand, commercially.

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Geo. H. Lichthardt, who has made a specialty of analytical chemistry ever since his graduation ten years ago, will receive the appointment of county chemist of Sacramento county July 1. He is well qualified to fill the position.

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The actual work on Philip's new drug store, in Elmhurst, is now under way and when completed will be the swellest store in the county. Philip & Philip expect to have the building ready in a few weeks.

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The Economic Drug Co. have opened the finest drug store in Nevada at Yerington. In addition to a full line of fresh drugs they will carry candies, cigars, stationery and toilet articles. Dr. F. E. Carpenter will have his office in the drug store. We wish them the success they deserve.

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The South Pasadena Pharmacy is fairly installed in its new quarters by Stephen H. Lederer, the proprietor. Mr. Lederer is well known in that city, having been engaged in business for several years. Every piece of furniture and every article in the stock of goods has been selected by Mr. Lederer with a view to maintaining the high standard of quality. The interior of the room is finished in genuine Mission style with fittings in perfect harmony. The walls are tinted a soft green and the entire atmosphere breathes of artistic handling and expresses individuality seldom found in a place of business, and not often in the modern home.

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J. J. Schnitzer, who has for the past ten years held a responsible position at Heath & Morrison's drug store, Riverside, has purchased a drug store at Newport Beach.

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Charles May has taken a position with the Alta Drug Company, and finds time to take a special course from Professor Flint. How is that for enterprise?

John C. Ing, '87, is prominently mentioned as a candidate for mayor of Sacramento at the coming fall election. He ought to make a good mayor if he fills the chair as well as he fills prescriptions.

The Board of Supervisors of San Luis Obispo county have decided to buy drugs in the open market. Sort o' free for all.

Geo. M. Sutherland, of the State Board of Pharmacy, for many years with the Grant Drug Co. and Lengfeld's, in San Francisco, has built for himself a neat store on Sherman street, Alameda.

Horace Nichols, U. C. '87, is night clerk for the Neve Drug Company, of Sacramento.

Mr. D. Ray Terwilliger, who for the past twelve years clerked for J. G. Munson, has purchased Dr. Bussing's drug store at Morgan Hill. Mr. Terwilliger was in San Jose last week when he stated that the business outlook is good.

Eugene Avery, Ing & Allee's junior clerk, is going to enter the College of Pharmacy this term. He is a strong "anti-frat" man.

Chester Gallup, a former drug clerk, has quit the pill business and is now working for Wells, Fargo & Co.

Another drug store is about to open in San Jose. It will be located on Second street, next door to the Jose Theatre. The firm name is Perrin & Kibbe.

A. L. Scholl, M. D., Ph. G., formerly of the Fifth and Mission street drug store, San Francisco, is paying his brother an extended visit at Los Gatos.

C. M. Moore, proprietor of the Swan Pharmacy, San Francisco, spent a few days in San Jose and vicinity last week.

W. J. McNeil, of Rhyolite, Nev., has sold his interest in the McNeil drug store to his partner, G. W. Peterson, who will continue at the old stand, corner of Golden and Colorado streets. Mr. McNeil left Sunday for Los Angeles.

C. C. Rubel, of Marysville, has been awarded the contract to supply the county with drugs.

J. W. Haney, of Half Way, Ore., has decided to install an up-to-date pharmacy in Freewater, Ore. Mr. Haney today purchased of R. W. Vanci the building now occupied by the "Freewater Times" for $1000, where he will place a new and up-to-date stock of drugs and chemicals within a few days.

William Giddings, the prominent druggist of Ogden Utah, is touring California.

The following have been licensed as pharmacists by the New Mexico Board of Pharmacy, after examinations administered during the recent session of the body in Roswell: Warren R. Cobean, Roswell; C. E. Branstetter, Hagerman; H. L. Hardy, Carlsbad; P. D. Reynolds, La Dande; J. Dieienbach, San Antonio; F. A. Butt, Clayton; R. R. Edwards, Portales; M. R. Kirkley, Roswell; J. F. Richardson, Artesia; C. L. Shelton, Tucumcari; A. J. Rolland, Carrizozo; P. Wahrly, Blacktower; O. M. Owensby, Texico.

Henri Plaus (of Paris), formerly with Lengfeld's, is with Yardley, at Sacramento.

Edgar Bridgewater is rolling pills for Willis & Martin Company, Sacramento.

Jay W. Swain, who has resided in Long Beach for the past two years, left yesterday for Goldfield, Nevada, where he has a position with a drug company. Mr. Swain has been with the Dickenson & Warson Drug Company of that city for some time and is popular with a large circle of friends.

John F. Allen, the druggist, of Corvallis, Ore., will hereafter dispense coin instead of pills, having accepted a position as cashier of the new bank in that town. Mr. Victor Spencer will hereafter fill prescriptions for the physically ill, while Mr. Allen fills the prescriptions for those ailing financially.

A. Zabaldano & Co. are fitting up their new store, northwest corner of Stockton and Pacific Streets, and when completed will have the handsomest store in the North Beach district.

Garaldi & Oliva will shortly open their new store on Montgomery Avenue.

The Adams-Johnson Drug Company, organized with a capital stock of $20,000, has purchased the drug business of Heath & Morrison, of Riverside, which has been established for nearly a score of years and is one of the oldest business firms in that town. The purchasers, J. E. Johnson and Earl B. Adams are well and favorably reckoned among the young business men of the city. Mr. Johnson has been located there for six years. He knows everybody and has established an enviable reputation in business and social circles. Mr. Adams was in the San Francisco fire. He and his wife went to Los Angeles and thence to Riverside. During his comparatively brief stay there he has made hosts of friends and has become locally famous by reason of the novelty of his window decorations.

R. E. Miller, manager of the Owl Drug Company is in Los Angeles for a few days, a guest at the Van Nuys Hotel.

Mont Chubb, a well-known druggist who formerly lived in Orange, was married in Redlands Wednesday to Miss Stella Fox, a popular young lady of that city. Mont is conducting a drug store in Redlands and we suppose will now be called Chubby without the "C."

Strict regulations are provided for Washington druggists under the food law passed by the 1907 legislature, as interpreted by the Attorney-General. In response to an inquiry from W. P. Bonney, secretary of the Washington State Pharmaceutical Association, the ruling is made that medicines prepared from a physician's prescription, as well as other preparations, must carry on the label a statement of the proportion of "alcohol, morphine, opium, cocaine, heroin, alpha or beta cocaine, chloroform, cannabis indica, chloral hydrate or acetanelide or any derivative of any such substance contained therein." The Attorney-General also holds that druggists holding a government license for the sale of liquor must also take out a State license, in order to comply with the act of 1907.

J. H. Poage, from Los Angeles, has been secured by Dr. Billings, of Rialto, to take charge of his store. Miss Poage will assist her brother, the management being in their hands.

H. C. LaBrier, a graduate of the St. Louis College of Pharmacy, has resigned his position with the Rowley Drug Company at Santa Ana and accepted one with Geo. T. Mallery, the proprietor of the Central Drug Company, San Bernardino.

Mr. W. O. Morton, the druggist of Glendale, has sold out his business to Mr. Zerr. Mr. Morton does not intend to leave Glendale, however, at least not at present, as he thinks too well of that city to tear himself away needlessly.

D. K. Parker, a druggist of Seattle, was fined $100 recently for having sold twenty-five cents worth of whiskey to Policeman William Steen on Sunday. The officer testified that he had tried four or five drug stores before he entered the pharmacy where Parker is employed. He said that he had to talk to Parker for some time before he could get him to sell the flask, Parker explaining that he had to be careful as they were not allowed to sell the whiskey without a prescription. Some men are punished unjustly.

The Home Drug Store, corner of Griffin and East Main streets, Los Angeles, is continuing its good run on prescriptions. One East side drug store has a placard in its window, with several strings of prescriptions, each about the size of a stovepipe, claiming 20,000 filled in three years. Not bad for East Los Angeles.

Keeping pace with the enterprise made by the Druggists of Alameda County, R. D. Fuller, of Berkeley, will have the front of his drug store made over. The entrance will be moved from the middle of the front to the corner, so that it will open from both streets. Large plate glass windows will cover the space now covered by the front door. The interior will also be improved by addition of new fixtures and new lamps, and the Dwight Way Pharmacy will become more metropolitan. It's hard to keep a good man down.

Bert Elliott, who has been in the employ of the Stafrin Drug Co., of Dallas, Ore., for two years, has been employed by M. L. Thompson, of Falls City, Ore. Mr. Thompson is fortunate to secure the services of one whose pleasing manner and ability as a drug clerk will please his many patrons.

LIBRARY OF THE UNIVERSITY OF CALIFORNIA

GOOD business chance in Los Angeles, Cal.—Old established drug store in heart of city, on Broadway; long lease; reasonable rental; a bargain at $15,000; time on part; answer quick. J. J. H. YOUNG, 1269 East Adams street, Los Angeles.

FINE drug business for sale in Sonoma county; owner leaving; you can get this cheap. See FARNWORTH & HARFORD, 3108 Putnam ave., Fruitvale, Cal.

ZELLERBACH PAPER Co.
OAKLAND
Z PAPER
LOS ANGELES
SAN FRANCISCO CAL. U.S.A.

*We furnish the Paper used in this Publication*

**FOR SALE**—Well established Drug Store, located within one block of the business center in Salt Lake City, three of the principal Theatres located within half block.

Annual Sales, $12,000.00. Rent, $100.00 per month.
Stock and Fixtures invoice, . . . $5,500.00

For particulars address SMITH DRUG CO., Salt Lake City, Utah

**FOR SALE OR EXCHANGE**—Corner Drug Store, the only one in good valley town.

Clean Stock and Fixtures, with Fountain;
Paying Place; Cheap Rent, or will sell building.

G. W. TURNER, 303½ Washington Street, - - PORTLAND

**SPECIAL ATTENTION**—The right way to buy a drug store—to sell one—to get a position or help, whether in U. S. or Canada, is to write F. V. KNIEST, R. P., "The Drug Store Man," Omaha, Neb., U. S. A. Established 1904. Strictly reliable expert and confidential service.

WANTED — Position as Manager or Head Clerk by a graduate. Registered in Oregon, Washington and California. References given.

PHARMACIST
3727 25th Street, San Francisco

## PRICE LIST OF DRUGS, CHEMICALS, ETC.

**These prices are submitted as ruling in the San Francisco market at time of publication, and are subject to fluctuation. Quotations are based on ordinary quantities, such as usually purchased by the average dealer. Containers are included unless otherwise indicated. See foot-note.**

| | | |
|---|---|---|
| ACETANILID. 1-lb. cart. incl | lb | 36 |
| Powd., 1-lb. cart. incl | lb | 36 |
| ACID. Acetic No. 8, carboys | lb | 07 |
| 1-lb bottles, M. C. W. | lb | 20 |
| 5-lb bottles, " | lb | 15 |
| Glacial, M. C. W. | lb | 44 |
| Acetic, U. S. P. (Sp. gr. 1.028) | lb | 21 |
| Arsenic, Hydrated Pure, Merck's | oz | 14 |
| Arsenous, Lumps, Pure, Merck's | oz | 8 |
| Arsenous, Powd., Pure, Merck's | oz | 8 |
| Benzoic, from Toluol, M.C.W., 1-lb cart. incl | lb | 60 |
| Benzoic, from Toluol, Merck's | oz | 13 |
| Benzoic, True from Benzoin, Merck's | oz | 15 |
| Benzoic, English, Merck, 1-oz boxes | oz | 16 |
| Benzoic, English, Merck's | lb | 2 24 |
| Benzoic, Merck's, 1-oz cartons | oz | 12 |
| Benzoic, Merck's. | lb | 55-65 |
| Boracic, crys., M. C. W. | lb | 18-20 |
| Boracic, powd., M. C. W. | lb | 18-20 |
| Boracic, im. powd., C. P., 1-lb cart. incl. | lb | 28 |
| Boracic, Squibb's, 500 gram | | 43 |
| Boric, H. P., Merck's | lb | 28 |
| Boric, powd., pure, Merck's | lb | 20 |
| Boric, Impalp., powd., Merck's | lb | 28 |
| Butyric, 100%, Merck's | oz | 27 |
| Butyric, H. P. | lb | 2 14 |
| Cacodylic, Merck's ⅛ | oz | 4 00 |
| Camphoric, Merck's | oz | 49 |
| Carbolic, Calvert's No. 1 | lb | 2 00 |
| Carbolic, Calvert's No. 2 | lb | 1 50 |
| Carbolic, M. C. W., gilt label | lb | 30 |
| Carbolic, 1-lb tin, M. C. W., 5-lb can, gilt label | lb | 26 |
| Carbolic, M. C. W., 10-lb can, gilt label. | lb | 25 |
| Carbolic, 1-lb bot | lb | 30 |
| Carbolic, Loose, crys., Merck's | lb | 70 |
| Carbolic, Silver Label, Merck's | lb | 31 |
| Carbolic, Solution, 1-lb. bot | doz | 2 50 |
| Carbolic, Crude | gal | 40-50 |
| Chromic, 1-oz vials | oz | 15 |
| Chrysophanic, true, M. C. W., 1-oz vials. | oz | 50 |
| Cinnamic, H. P., Merck's | oz | 39 |
| Citric, crys. | lb | 63-67 |
| Gallic, 1-oz cartons, Merck's | oz | 11 |
| Gallic | lb | 70 |
| Hydrobromic, conc., 1-oz vials, M.C.W. | oz | 15 |
| Hydrobromic, U. S. P., 10%, M.C.W. | lb | 34 |
| Hydrocyanic, 1-oz vials, U.S.P., M.C.W. | oz | 10 |
| Hydriodic (Sp. gr. 1-50), Merck's | oz | 42 |
| Hydriodic (Sp. gr. 1.70), Merck's | oz | 52 |
| Hydrocyanic, U. S. P., Mallinckrodt's | lb | 39 |
| Hydrocyanic, U. S. P., Scheeles's | oz | 35 |
| Hydrofluoric, 1s, g. p. bots. incl., M.C.W. | lb | 1 30 |
| Hydrofluoric, ½s, g. p. bots. incl. " | lb | 1 80 |
| Hydrofluoric, ¼s, g. p. bots. incl. " | lb | 2 25 |
| Hydrofluoric, 1-oz g. p. bots. incl. " | lb | 37 |
| Hypophosphorous, 50%, 1-lb G. S. B. " | lb | 1 24 |
| Hypophosphorous, 50%, 1-oz G. S. B. " | oz | 19 |
| Lactic, conc., 1-oz vials, M. C. W. | oz | 12 |
| Lactic, conc., 1s, Merck's | lb | 79 |
| Lactic, dilute, 1-oz vials, M. C. W. | oz | 8 |
| Muriatic, carboys | lb | 3¼ |
| Muriatic, 6-lb bots | each | 75 |
| Muriatic, C. P., 6-lb bots | lb | 22 |
| Muriatic, C. P., 1-lb bots | lb | 38 |
| Nitric, carboys. | lb | 8 |
| Nitric, 7-lb bots | ea | 1 10 |
| Nitric, C. P., 7-lb bots | lb | 22 |
| Nitric, 1-lb bots. | lb | 40 |
| Nitro-Muriatic | lb | 40 |
| Nitrous, fuming | lb | 65 |
| Oxalic. . . | lb | 14-16 |
| Oxalic, chem. pure, M. C. W. | lb | 30 |
| Phosphoric, glacial, Merck's | lb | 64 |
| Phosphoric, syrupy (85%) | lb | 55 |
| Phosphoric, diluted, M. C. W. | lb | 25 |
| Phosphoric, M. C. W., U. S. P., 50%. | lb | 40 |
| Phosphoric, glacial, 1-oz vials | oz | 11 |
| Phosphoric, glacial, 1s, M. C. W. | lb | 64 |
| Picric | lb | 60-70 |
| Pyrogallic, Resublimated, Merck's | oz | 27 |
| Pyrogallic, Merck's, 1-lb cans | lb | 2 35 |
| Pyrogallic, Merck's, ½-lb cans | lb | 2 45 |
| Pyrogallic, Merck's, ¼-lb cans | lb | 2 55 |
| Pyrogallic, Schering's | lb | 2 50 |
| Pyrogallic, Schering's | ½-lb | 2 60 |
| Pyrogallic, Schering's | ¼-lb | 2 70 |
| Pyrogallic, Schering's, oz. vials | oz | 28 |
| Pyroligneous | gal | 40 |
| Salicylic, Merck's, 1-lb cartons | lb | 46 |
| Salicylic, from Oil Wintergreen, Merck's. | oz | 44 |
| Salicylic, Amorph., Merck's | lb | 46 |
| Salicylic, from Wintergreen, Merck's | oz | 44 |
| Succinic, Merck's, oz. bottles | oz | 79 |
| Sulphuric, Aromatic | lb | 75 |
| Sulphuric, carboys | lb | 2-2¼ |
| Sulphuric, 9-lb bottles | each | 1 00 |
| Sulphuric, C. P., 9-lb. bottles | lb | 22 |
| Sulphuric, C. P., 1-lb bottles | lb | 38 |
| Sulphurous, U. S. P., solution | lb | 25 |
| Tannic. . . | lb | 85-90 |
| Tannic, H. P., Merck's | lb | 1 71 |
| Tartaric, crystallized | lb | 39-45 |
| Tartaric, powdered | lb | 39-45 |
| Tri-chlor-acetic, Merck's | oz | 32 |
| Valerianic, Merck's | oz | 20 |
| ACONITINE. Amorphous, Merck's | dr | 1 40 |
| Cryst., Merck's | dr | 1 40 |
| ADAPES LANAE. B. P. | lb | 35 |
| AGARIC. White. | lb | 45 |
| ALBOLINE. | lb | 50 |
| 5-lbs | lb | 45 |
| Liquid | lb | 50 |
| Liquid, 5-lbs | lb | 45 |
| AGURIN | oz | 1 70 |
| ALBUMEN. Egg. | lb | 1 45 |
| ALCOHOL. Absolute. | qt | 1 00 |
| 94%, 10-gal. case. | gal | 2 85 |
| 94%, 5-gal. case. | gal | 2 90 |
| Wood, 10-gal. case. | gal | 75 |
| Wood, 5-gal. case. | gal | 75 |
| Wood, Columbian Spirits, 5 gal. in case. | gal | 1 02 |
| Wood, Columbian Spirits, barrels | gal | 85 |

***Articles quoted in this Journal as M. C. W. are the products of the Mallinckrodt Chemical Works.**

| | | |
|---|---|---|
| Wood, Columbian Spirits, ½ barrels | gal | 95 |
| Cologne Spirits, 5 cents advance over price of Alcohol. | | |
| ALDEHYDE. Conct., Merck's | oz | 25 |
| ALLSPICE. | lb | 17 |
| Powdered | lb | 20 |
| ALMOND MEAL. | lb | 45 |
| ALMONDS. Bitter, shelled. | lb | 45 |
| Sweet, shelled. | lb | 45 |
| ALOIN. 1-oz vials | oz | 11 |
| ALUM. Ammonio-Ferric, M. C. W. | lb | 34 |
| Chrome | lb | 21 |
| Burnt | lb | 15 |
| Ground | lb | 7-9 |
| Lump. | lb | 5-8 |
| Powdered. | lb | 7-9 |
| ALUMINUM. Aceto-Tartrate, M. C. W. | oz | 20 |
| Bromide, M. C. W. | oz | 29 |
| Chloride, M. C. W. | lb | 79 |
| Chloride, M. C. W. | oz | 14 |
| Hydrated, pure, M. C. W. | lb | 79 |
| Metallic, M. C. W. | oz | 17 |
| Sulphate, pure, M. C. W. | lb | 25-29 |
| Sulphate, H. P., Merck's | lb | 59 |
| ALUMNOL | oz | 60 |
| AMIDOL. 1-oz. can | oz | 65 |
| AMMONIA. Spirits of | lb | 75 |
| Spirits of, aromatic | lb | 75 |
| Aqua, 26 deg., 1-lb. bot | lb | 20 |
| Aqua, 26 deg., 4-lb bot | lb | 16 |
| Aqua, 26 deg., 5 gal. can | lb | 11 |
| Aqua, 26 deg., carboy | lb | 9½ |
| Aqua, Washing, 5-gal. can | gal | 50 |
| AMMONIUM. Acetate, cryst., M. C. W. | oz | 14 |
| Arseniate, 1-oz vials, M. C. W. | oz | 22 |
| Benzoate, 1-oz vials, M. C. W. | oz | 14 |
| Benzoate, M. C. W. | lb | 1 14 |
| Bichromate, 1-oz vials, M. C. W. | oz | 14 |
| Bromide, 1-oz vials, M. C. W. | oz | 10 |
| Bromide, M. C. W. | lb | 46 |
| Carbonate. | lb | 15-18 |
| Carbonate, powdered | lb | 20 |
| Carbonate, C. P., Squibb's, 1-500 gram | | 45 |
| Citrate, 1-oz. vials, M. C. W. | oz | 16 |
| Hypophosphite, 1-oz vials, M. C. W. | oz | 21 |
| Hypophosphite, M. C. W. | lb | 1 70 |
| Iodide, 1-oz. vials, M. C. W. | oz | 38 |
| Muriate, lump. | lb | 14-16 |
| Muriate, gran. | lb | 10-12 |
| Muriate, gran., pure, 1-lb cartons | lb | 20 |
| Muriate, powdered, pure | lb | 19 |
| Muriate, Po | lb | 19 |
| Muriate, Po., Squibb's | lb | 35 |
| Nitrate, H. P., Merck's | lb | 44 |
| Nitrate, cryst., refined | lb | 37 |
| Oxalate, H. P., Merck's | lb | 85 |
| Phosphate | lb | 84 |
| Salicylate, Merck's | lb | 1 10 |
| Salicylate, Merck's | oz | 13 |
| Succinate | oz | 79 |
| Sulphate, com'l | lb | 12 |
| Sulphate, C. P., Merck's | lb | 29 |
| Sulpho Cyanate, pure | oz | 10 |
| Valerianate, cryst., 1-oz vials | oz | 24 |
| Valerianate, cryst. | lb | 1 75 |
| AMMONOL | oz | 1 05 |
| AMYL. Acetate | lb | 69 |
| Butyrate, M. C. W. | oz | 30 |
| Nitrite, Merck's | oz | 29 |
| Valerianate, M. C. W. | lb | 2 59 |
| ANNATTO. Roll | lb | 60 |
| ANODYNE. Hoffman's, 1-lb bottle | lb | 75 |
| ANTHRASOL | oz | 60 |
| ANTIFEBRIN. Merck's | oz | 17 |
| ANTIKAMNIA and its combinations | oz | 1 00 |
| 10-oz lots for $9.25; 25-oz for $22.80 | | |
| Tablets, Vest Pocket | doz | 1 75 |
| Tablets, Vest Pocket, 1 gross, 5% off. | | |
| ANTIMONY. Black, powdered, pure | lb | 15 |
| Black, powdered, commercial | lb | 10 |
| Chloride, cryst., 1-oz vials | oz | 22 |
| Chloride, sol. (Butter of) | lb | 39 |
| Oxysulphuret (Kermes Mineral) | lb | 1 00 |
| Potassium Tartrate, powdered | lb | 42 |
| Sulphuret, precipitated | lb | 92 |
| ANTINOSINE | oz | 2 10 |
| ANTIPYRIN. Knorr's | oz | 35 |
| New | oz | 25 |
| APIOL. Fluid Green, Merck's | oz | 37 |
| APOLSYIN. S. & G. | oz | 65 |
| APOMORPHINE. Hydrochlor. Amor., Merck's, ⅛-oz vial | oz | 3 50 |
| Mur. cryst. | oz | 8 50 |
| Muriate, Amorphous, ⅛-oz vials, M.C.W. | oz | 3 50 |
| ARISTOL | oz | 1 80 |
| ARGOLS. Red | lb | 15 |
| Red, powdered | lb | 20 |
| ARGYROL | oz | 1 50 |
| ARROWROOT. St. Vincent | lb | 18-20 |
| Taylor's Bermuda, ¼s and ½s | lb | 35 |
| Taylor's Bermuda, bulk | lb | 35 |
| ARSENIC. Bromide, 1-oz vials, M. C. W. | oz | 27 |
| Chloride, sol., M. C. W. | lb | 30 |
| Iodide, 1-oz vials, M. C. W. | oz | 44 |
| Metallic | lb | 45 |
| Red, powdered | lb | 15 |
| Solution (Donovan's) | lb | 40 |
| Solution (Fowler's) | lb | 30 |
| Sulphured, red powdered | lb | 33 |
| Sulphured, yellow powdered | lb | 33 |
| White, lump | lb | 30 |
| White, powdered, commercial | lb | 18 |
| Yellow (orpiment) | lb | 35 |
| ASBESTOS. Fibrous, gro | lb | 20 |
| ASPARAGIN. ⅛-oz vials | oz | 1 50 |
| ASPIRIN | oz | 43 |
| ATROPIA. Pure, ⅛-oz vials, Merck's | oz | 6 70 |
| Sulphate, ⅛-oz vials, Merck's | oz | 5 65 |
| BALSAM. Copaiba, 8-lb can | lb | 1 35 |
| Copaiba, 5-lb bottle. | lb | 1 40 |
| Copaiba, 1-lb bottle | lb | 1 50 |
| Copaiba, solidified. | lb | 1 50 |
| Fir, Canada. | lb | 70-75 |
| Fir, Oregon. | lb | 50-55 |
| Gurgun | lb | 40 |
| Peru | lb | 3 00-3 25 |
| Sulphur | lb | 60 |
| Tolu | lb | 75 |
| BARIUM. Acetate, 1-oz vials, M. C. W. | oz | 16 |
| Carbonate, M. C. W. | lb | 37 |
| Carbonate, precip., Merck's | lb | 30 |
| Chloride, chemically pure, M. C. W. | lb | 38 |
| Chloride, H. P., cryst., Merck's | lb | 38 |
| Nitrate, M. C. W. | lb | 23 |
| Nitrate, H. P., cryst., Merck's | lb | 37 |
| Sulphide, commercial, Merck's | lb | 43 |
| Sulphide, pure, Merck's | lb | 53 |
| Sulphate, M. C. W. | lb | 13 |
| BARK. Alder, black, pressed, 1-lb | lb | 22 |
| Alder, red or tag, pressed, 1-lb | lb | 24 |

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| | | |
|---|---|---|
| Angostura | lb | 30 |
| Ash, black, pressed, 1-lb | lb | 20 |
| Ash, mountain, pressed, 1-lb | lb | 24 |
| Ash, white, pressed, 1-lb | lb | 25 |
| Barberry, pressed, 1-lb | lb | 30 |
| Barberry, powdered | lb | 35 |
| Bayberry, pressed, 1-lb. | lb | 25 |
| Bayberry, powdered. | lb | 30 |
| Birch, pressed, 1-lb | lb | 24 |
| Black Haw, powdered | lb | 35 |
| Black Haw, pressed, 1-lb | lb | 30 |
| Black Willow, pressed, 1-lb | lb | 25 |
| Blackberry. . . | lb | 20 |
| Buckhorn, pressed, 1-lb. | lb | 22 |
| Butternut, pressed, 1-lb. | lb | 22 |
| Calisaya, yellow, commercial. | lb | 30 |
| Calisaya, yellow, commercial, powd | lb | 32 |
| Calisaya, East India. | lb | 42 |
| Calisaya, powdered. . | lb | 45 |
| Canella | lb | 30 |
| Canella, powdered | lb | 35 |
| Cascara, Sagrada. | lb | 18 |
| Cascara, Sagrada, powdered. | lb | 20 |
| Cascarilla | lb | 25 |
| Cascarilla, powdered | lb | 30 |
| Cassia. . . | lb | 22 |
| Cassia, powdered | lb | 25 |
| Cinchona, red. | lb | 45-50 |
| Cinchona, red powdered. | lb | 45-50 |
| Cinnamon, Ceylon. | lb | 40 50 |
| Cinnamon, Ceylon, powdered. | lb | 40-50 |
| Cotton Root, powdered. | lb | 35 |
| Cotton Root, pressed, 1-lb | lb | 35 |
| Cramp, powdered | lb | 25 |
| Cramp, pressed, 1-lb | lb | 19 |
| Cundurango | lb | 45 |
| Cundurango, powdered | lb | 50 |
| Dogwood, pressed, 1-lb | lb | 20 |
| Dogwood, powdered | lb | 25 |
| Elder, pressed, 1-lb | lb | 35 |
| Elm, select, slabs. | lb | 30 |
| Elm, ground, bulk | lb | 30 |
| Elm, powdered | lb | 30 |
| Elm, powdered, ¼s | lb | 30 |
| Elm, powdered, ⅛s | lb | 35 |
| Elm, powdered, ozs | lb | 40 |
| Hemlock, pressed, 1-lb. | lb | 25 |
| Hemlock, powdered. | lb | 30 |
| Jamaica Dogwood, pressed, 1-lb | lb | 35 |
| Jamaica Dogwood, powdered, 1-lb | lb | 35 |
| Mezereon, pressed, 1-lb | lb | 28 |
| Oak, red, pressed, 1-lb | lb | 22 |
| Oak, white, powdered. | lb | 22 |
| Oak, white, pressed, 1-lb | lb | 22 |
| Poplar, white, powdered, 1-lb | lb | 20 |
| Poplar, white, pressed, 1-lb | lb | 15 |
| Poplar, yellow, pressed, 1-lb | lb | 18 |
| Prickly Ash, powdered | lb | 40 |
| Prickly Ash, pressed, 1-lb | lb | 33 |
| Quebracho | lb | 35 |
| Sassafras. . . | lb | 28 |
| Sassafras, powdered | lb | 25 |
| Simaruba | lb | 50 |
| Soap Tree | lb | 9-10 |
| Soap Tree, ground | lb | 16 |
| Soap Tree, powdered. | lb | 15 |
| Sumac, pressed, 1-lb | lb | 21 |
| Tamarac, pressed, 1-lb. | lb | 22 |
| Wahoo Root, pressed, 1-lb | lb | 33 |
| Wild Cherry. . | lb | 16 |
| Wild Cherry, ground. | lb | 18 |
| Wild Cherry, powdered | lb | 20 |

| | | |
|---|---|---|
| BAY RUM. Domestic | gal | 2 25 |
| Imported | gal | 3 00 |
| BEANS. Calabar. | lb | 40 |
| Tonka, Angostura | lb | 1 25 |
| Vanilla, short, true Mexican | lb | 8 50 |
| Vanilla, long, true Mexican | lb | 9 50 |
| Vanilla, Tahita | lb | 1 25-1 50 |
| BEBEERINE. Pure, 1-oz vials | oz | 2 04 |
| Sulphate, 1-oz vials | oz | 1 49 |
| BENZOLE. Pure | lb | 35 |
| H. P., Merck's | lb | 37 |
| BENZIN. Gallon | | 30 |
| 5 and 10 gallons | gal | 25 |
| Pints | doz | 1 60 |
| BERBERINE. Hydrochloride, Merck's | oz | 2 29 |
| Sulphate, Merck's | oz | 2 29 |
| BERRIES. Buckthorn | lb | 30 |
| Coccuius Indicus | lb | 15 |
| Cubeb, stemless | lb | 25 |
| Cubeb, powdered | lb | 30 |
| Elder | lb | 30 |
| Juniper, Italian | lb | 10 |
| Poke | lb | 25 |
| Prickly Ash. | lb | 40 |
| Sumac | lb | 25 |
| Sumac, powdered | lb | 30 |
| BETOL | lb | 60 |
| BISMUTH. Acetate, M. C. W. | oz | 34 |
| Citrate, M. C. W. | lb | 2 64 |
| Citrate, M. C. W. | oz | 24 |
| Citrate and Ammonia, M. C. W | oz | 24 |
| Citrate and Ammonia, M. C. W. | lb | 2 64 |
| Lactate | oz | 42 |
| Metallic | lb | 2 25 |
| Nitrate, M. C. W. | oz | 23 |
| Oxide, Hydrated, M. C. W | lb | 3 33 |
| Oxide, Hydrated, M. C. W | oz | 32 |
| Oxychloride, M. C. W | lb | 2 42 |
| Salicylate, 40%, Merck's | oz | 20 |
| Salicylate, 64% Basic, Merck's | oz | 22 |
| Salicylate, 64%, M. C. W | lb | 2 39 |
| Subbenzoate. . . | oz | 32 |
| Subcarbonate | lb | 2 67 |
| Subgallate, Merck's | oz | 26 |
| Subiodide, M. C. W. | lb | 4 59 |
| Subiodide, 1-oz vials, M. C. W | oz | 36 |
| Subnitrate, M. C. W | lb | 2 42 |
| Tannic, 1-oz vials, M. C. W | oz | 25 |
| Valerianate, ⅛s | oz | 60 |
| BLUE MASS | lb | 60 |
| Powdered | lb | 62 |
| BLUE VITROL. Barrels, 10 | lb | 14-16 |
| Powdered | lb | 18 |
| BOLE. Armenian | lb | 18 |
| BONE ASH | lb | 6-8 |
| BORAX. C. P., Squibb's | lb | 33 |
| Pacific Coast Borax Co., 1-lb | doz | 1 14 |
| Pacific Coast Borax Co., ¾-lb | doz | 90 |
| Pacific Coast Borax Co., ¼-lb | doz | 48 |
| Powdered | lb | 10-12 |
| Pure Granular | lb | 25 |
| Refined | lb | 10-12 |
| BOROFORMOL. Pints | doz | 7 50 |
| BOROGLYCERIDE Solution. | lb | 60 |
| BOROTHYME. 4-oz cans | doz | 9 00 |
| BROMINE | lb | 83 |
| Chloride, solution | oz | 60 |
| BRUCINE. ⅛-oz vials, M. C. W | oz | 1 75 |

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| | | |
|---|---|---|
| BRUCINE. Merck's | oz | 1 75 |
| Phosphate, Merck's | oz | 1 75 |
| Sulphate, Merck's, ⅛-oz vials | oz | 1 75 |
| BUDS. Balm of Gilead | lb | 60 |
| Cassia | lb | 40 |
| BUTTER CACAO. Ghirardelli. | lb | 60 |
| German. . . | lb | 62 |
| CADMIUM. Bromide, M. C. W | oz | 20 |
| Iodide, M. C. W., 1-oz vials | oz | 33 |
| Sulphate, M. C. W., 1-oz vials | oz | 24 |
| CAFFEIN. Bromide, 1-oz vials | oz | 31 |
| ⅛-oz vials | oz | 51 |
| Citrated, Merck's | oz | 23 |
| Pure, Merck's | oz | 29 |
| Sulphate, ⅛-oz vials, Mallinckrodt's | oz | 55 |
| Salicylate, true salt, ⅛s, Mallinckrodt's | oz | 55 |
| CALAMINE | lb | 18 |
| CALCIUM. Bromide, 1-oz vials, M. C. W. | oz | 12 |
| Bromide, M. C. W | lb | 64 |
| Chloride, fused, M. C. W | lb | 64 |
| Chloride, granular, M. C. W | lb | 30 |
| Glycerylphosphate | oz | 22 |
| Hypophosphite, 1-oz vials. | oz | 14 |
| Hypophosphite. . | lb | 89 |
| Hypophosphite and Sodium, 1-oz vials | oz | 16 |
| Hypophosphite and Sodium, M. C. W. | lb | 1 09 |
| Iodide, 1-oz vials, M. C. W | oz | 37 |
| Lactophosphate, soluble | lb | 1 35 |
| Lactophosphate, soluble | oz | 17 |
| Phosphate, precipitated, 1-lb cart | lb | 20 |
| Phosphide, 1-oz vials | oz | 50 |
| Sulphate, pure | lb | 49 |
| Sulphide, 1-oz vials | oz | 10 |
| Sulphide | lb | 37 |
| Sulphite | lb | 84 |
| Sulpho, carbolate, M. C. W | oz | 11 |
| CALOMEL. Bulk. | lb | 1 00 |
| English, Howard's | lb | 1 35 |
| CAMPHOR. Monobromated, Mal'rodt's | oz | 27 |
| Tar flake. | lb | 5-7 |
| Tar balls. | lb | 5-7 |
| CANDY. Coltsfoot Rock | lb | 30 |
| Horehound. . . | lb | 12 |
| Rock, on strings | lb | 15 |
| Rock, brown | lb | 16 |
| Rock, red | lb | 15 |
| Rock, white | lb | 14 |
| CANTHARIDES. Russian, powdered | lb | 1 50 |
| Chinese, powdered | lb | 1 10 |
| CAPSICUM. African, pods | lb | 25 |
| African, powdered | lb | 30 |
| Bombay | lb | 20 |
| CARAMEL ........gal, $1.25. | lb | 30 |
| CARBON. Bisulphide | lb | 17 |
| Bisulphide, 50-lb cans | can | 4 73 |
| Bisulphide, Wheeler's 50-lb can | ea | 4 73 |
| Bisulphide, 1-gal cans. | gal | 1 35 |
| Bisulphide, quart bottles | doz | 4 50 |
| Bisulphide, Purif., Merck's | lb | 49 |
| CARMINE. No. 40. | oz | 40 |
| No. 40. | lb | 4 50 |
| CASSIA FISTULA | lb | 20 |
| CASTOR FIBER. | oz | 1 50 |
| Castor Fiber, powdered | oz | 1 75 |
| CERATE. Cantharides | lb | 1 00 |
| Goulard's, U. S. P. | lb | 70 |
| Resin, U. S. P. | lb | 50 |
| Savin | lb | 60 |
| Simple | lb | 50 |
| Spermaceti | lb | 70 |

| | | |
|---|---|---|
| Turner's | lb | 60 |
| Zinc, Carbonate, true | lb | 60 |
| Zinc, Oxide | lb | 60 |
| CERIUM. Oxalate, Merck's | oz | 09 |
| Oxalate, 1-lb cartons | lb | 47 |
| CHALK. Crayons, white | lb | 15 |
| French, cut | lb | 18-20 |
| French, powdered | lb | 5-8 |
| Precipitated, English | lb | 10-12 |
| Prepared in drops, bulk | lb | 7-8 |
| Prepared in drops, 5-lb boxes | lb | 8-10 |
| Prepared pink, 8-lb boxes | lb | 10 |
| White, in lumps | lb | 3-4 |
| CHARCOAL. Animal | lb | 8-10 |
| Willow, powdered | lb | 15-20 |
| CHINA CLAY | lb | 10 |
| CHINESE SHAVINGS | lb | 60 |
| CHINOIDINE. 1-oz rolls | oz | 12 |
| CHLORAL HYDRATE, CROTON, 1-oz vial incl. | oz | 35 |
| Crystals, Merck's | lb | 1 35 |
| Crystals, Merck's, ½s | lb | 1 45 |
| Crystals, Merck's, ¼s | lb | 1 55 |
| Crystals, Merck's, oz | lb | 2 10 |
| Crystals, M. C. W., 1s | lb | 1 35 |
| Crystals, M. C. W., ½s | lb | 1 45 |
| Crystals, M. C. W., ¼-lb cartons | lb | 1 50 |
| Crystals, M. C. W., ozs | lb | 2 10 |
| Crystals, 1-lb g. s. b. incl., Schering | lb | 1 35 |
| Crystals, ½-lb g. s. b. incl., Schering | lb | 1 45 |
| Crystals, ¼-lb g. s. b. incl., Schering | lb | 1 55 |
| Crystals, 1-oz g. s. vls. incl., Schering | oz | 17 |
| CHLORALAMID | 25 gramme | 80 |
| CHLOROFORM. 1-lb tin | lb | 52 |
| In 7-lb bottle | lb | 42 |
| Squibb's, 1-500 gramme. | lb | 90 |
| CINCHONINE Alk'd pure 1-oz vials M.C.W. | oz | 25 |
| Bisulphate, M. C. W. | oz | 18 |
| Muriate, M. C. W | oz | 17 |
| Sulphate, 1-oz vials, M. C. W | oz | 17 |
| CINCHONIDINE Alk. pure 1-oz v'ls M.C.W. | oz | 50 |
| Bisulphate, 1-oz vials, M. C. W | oz | 30 |
| Muriate, M. C. W. | oz | 32 |
| Salicylate, 1-oz vials, M. C. W | oz | 34 |
| Sulphate, 1-oz vials, M. C. W | oz | 30 |
| Sulphate, 5-oz cans, M. C. W | oz | 25 |
| CLOVES. Zanzibar | lb | 30 |
| Zanzibar, powdered | lb | 35 |
| COBALT | lb | 25 |
| Cobalt, powdered | lb | 30 |
| COCAINE. Alk., 1-oz. vials, incl | oz | 3 80 |
| Hydrochloride, Merck's | oz | 3 05 |
| Hydrochloride Cryst., 1-oz v'ls, M.C.W. | oz | 3 05 |
| Hydrochloride Cryst., ½-oz v'ls, M.C.W. | oz | 3 20 |
| Hydrochloride Cryst., ¼-oz v'ls, M.C.W. | oz | 3 30 |
| Hydrochloride Cryst., ⅛-oz v'ls, M.C.W. | oz | 3 45 |
| COCHINEAL. Honduras. | lb | 60 |
| Honduras, powdered. | lb | 65 |
| CODEINE. Merck's Pure. | oz | 4 75 |
| Muriate ............1-oz, $4.50 | ⅛s | 4 70 |
| Phosphate, ⅛-oz vials. | oz | 4 45 |
| Sulphate, M. C. W. | oz | 4 50 |
| COLLODION | lb | 90 |
| 1-oz vials | doz | 1 25 |
| Cantharidal | lb | 2 35 |
| Cantharidal, 1-oz vials | doz | 2 20 |
| Flexible | lb | 1 00 |
| Flexible, 1-oz vials | doz | 1 50 |
| COLCHICINE. cryst., Merck's, 15-grain | gr | 14 |
| C. P., Amorph., 15-grain vials | gr | 30 |

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| | | |
|---|---|---|
| COLOCYNTH. Apples, Trieste | lb | 60-65 |
| Apples, powdered | lb | 75 |
| COMPOSITION POWDER, 2-oz papers | lb | 35 |
| CONFECTION. Aromatic | lb | 1 00 |
| Opium | lb | 1 50 |
| Rose, U. S. P. | lb | 65 |
| Senna, U. S. P. | lb | 70 |
| Theriac | lb | 1 25 |
| COPPER. Acetate, cryst., C.P., M.C.W. | lb | 74 |
| Acetate, com'l, lump | lb | 40 |
| Acetate, Po. Verdigris | lb | 45 |
| Ammoniated | lb | 59 |
| Arsenite, 1-oz vials, M. C. W. | oz | 19 |
| Arsenite, 1-oz vials | oz | 19 |
| Bromide | oz | 32 |
| Iodide, M. C. W. | oz | 44 |
| Nitrate | lb | 54 |
| Sulphate, C. P., granulated, 1-lb. boxes | lb | 23 |
| Sulphate, Caustic Pencils, Merck's | doz | 1 75 |
| Sulphate, purified, 1-lb cartons | lb | 21 |
| COPPERAS. bbls 1¼ | lb | 3-4 |
| CORROSIVE SUBLIMATE | lb | 92 |
| Powdered. . . | lb | 95 |
| COTOIN. Para, Merck's, ⅛-oz | oz | 14 00 |
| COTTON. Negative. | oz | 60 |
| COWHAGE. 1-oz cans | oz | 55 |
| CREAM TARTAR, pure, powdered | lb | 34-37 |
| Pure, powdered, 25-lb box | lb | 30 |
| CREOLIN. ½-lb | doz | 4 00 |
| 1-lb | doz | 8 00 |
| CREOSOTE. Beechwood, Merck's | lb | 94 |
| Merck's, ½-lb. | lb | 1 10 |
| Merck's, ¼-lb. | lb | 1 20 |
| CREOSOTE CARBONATE | oz | 65 |
| In ¼-lb | lb | 9 25 |
| In ½-lb | lb | 9 15 |
| In 1-lb | lb | 9 10 |
| CROCUS MARTIS | lb | 16 |
| CUDBEAR | lb | 30 |
| CUMARIN | oz | 45 |
| CUMENE (Cumol), Merck's | lb | 1 10 |
| CURCUMA. Powdered | lb | 16 |
| CUTTLEFISH | lb | 35 |
| Jeweler's | lb | 85 |
| Powdered | lb | 30 |
| DATURINE. Alk., cryst., 5-gr, Merck | ea. | 75 |
| DEXTRIN. . . | lb | 12-15 |
| DIASTASE. of Malt | oz | 1 14 |
| DIGALEN. ½-oz bottles | ea | 1 00 |
| DIGITALIN. ⅛-oz vials, Merck's | oz | 5 75 |
| DIONIN. ⅛s, Merck's | oz | 6 25 |
| 15-gr vials, Merck's. | ea | 35 |
| DOVER'S POWDER, U. S. P. | lb | 1 50 |
| DRAGON'S BLOOD, Mass. | lb | 55 |
| Powdered. . . | lb | 65 |
| Reed's. . . | lb | 85 |
| DIURETIN. . . | oz | 1 80 |
| DUBOISINE, Sulphate, Merck's, 10-gr vial | | 1 10 |
| EARTH, Fuller's, powdered. | lb | 8-10 |
| EIKONOGEN, lb, $3.95; ½s, $4.20 | oz | 37 |
| ¼s. | lb | 4 80 |
| ELATERIN, Merck's, 15-gr vial | | 1 25 |
| ELATERIUM, ⅛-oz vials. | oz | 3 00 |
| EMERY. Flour. | lb | 10-12 |
| Grain. . . | lb | 10-12 |
| EMETIN (Resinoid), Merck's. | oz | 7 53 |
| (Alkaloid), pure, Merck's, 15-gr vial | | 1 25 |
| ERGOT. Spanish. . . | lb | 65 |
| Spanish, powd | lb | 65 |
| ERGOTIN. Ergotin-Bonjean, Merck's | oz | 39 |
| ERGOTOLE. S. & D. | doz | 4 50 |
| ESERINE (Physostigmine), 5 gr Alkaloid, Merck's | gr | 13 |
| Sulphate, 5-gr vials, Merck's | ea | 50 |
| Sulphate, 10-gr vials, Merck's | ea | 1 00 |
| Sulphate, 15-gr vials, Merck's | ea | 1 50 |
| ETHER. Acetic, M. C. W., 1-lb bot | lb | 59 |
| Benzoic, 1-oz bot. | oz | 34 |
| Butyric, 1-lb bot. | lb | 1 70 |
| Chloric, U. S. P., M. C. W., 1-lb bot | lb | 64 |
| Chloric, concent., M. C. W., 1-lb bot | lb | 74 |
| Formic, 1-lb bot. | lb | 1 59 |
| Hydrobromic, 1-oz bot. | oz | 20 |
| Nitrous, conc., M. C. W., ¼-lb bot | lb | 1 20 |
| Nitrous, conc., M. C. W., ½-lb bot | lb | 1 10 |
| Nitrous, conc., M. C. W., 1-lb bot | lb | 1 00 |
| Nitrous Spirit, 4-lb bot. | lb | 58 |
| Sulphuric, U.S.P., Mallinckrodt's, 1-lb can | lb | 81 |
| Sulphuric, U.S.P., Mallinckrodt's, 3-lb can | lb | 78 |
| Sulphuric, conc., 1-lb can | lb | 87 |
| Sulphuric, conc., 3-lb can | lb | 84 |
| Sulphuric, washed, 1-lb bot | lb | 87 |
| Sulphuric, Squibb's, in 1-500 gm cans | ea | 1 35 |
| Sulphuric, Squibb's, in 1-250 gm cans | ea | 70 |
| Sulphuric, Squibb's, in 1-100 gm cans | ea | 33 |
| Valerianic. . | oz | 44 |
| ETHYL. Bromide, Merck's. | oz | 20 |
| Chloride, 10 gramme tubes Bengue | doz | 5 00 |
| Chloride, 30 gramme tubes Bengue | doz | 10 00 |
| Chloride, Merck's, 10 gramme | ea | 40 |
| Iodide (see Hydriodic Ether), Merck's | oz | 54 |
| EUCALYPTOL. Merck's. | oz | 16 |
| EUCAINE. A or B, ⅛s | oz | 3 60 |
| EUDOXINE. . . | oz | 2 10 |
| Tablets, 3-gr. . | oz | 2 60 |
| Tablets, 5-gr. | oz | 2 50 |
| Tablets, 1-3 gr, ¼-oz bots | oz | 3 00 |
| EUKATROL, powd | oz | 1 00 |
| Tablets | oz | 1 00 |
| EUROPHEN. . . | oz | 1 80 |
| EXALGINE. . | oz | 1 50 |
| EXTRACT. Licorice, Corigliano. | lb | 45 |
| Licorice, Mellor & Rittenhouse | lb | 27-30 |
| Licorice, M. & R., 25 and 50-lb box | lb | 26 |
| Licorice, soft, perf., clearly soluble | lb | 75 |
| Licorice, Y. & S | lb | 27-30 |
| Licorice, powd. . . | lb | 35 |
| Logwood, bulk. | lb | 14 |
| Logwood, ¼s. | lb | 20 |
| Logwood, ½s. | lb | 18 |
| Logwood, 1s. | lb | 16 |
| Male Fern, U. S. P., Merck's | lb | 2 25 |
| Malt, dry, Merck's. | lb | 1 25 |
| Opium, Aqueous, dry, Merck's | oz | 1 04 |
| Witch Hazel. . | gal | 1 10 |
| Witch Hazel, 5-gal kegs, Dickenson's | gal | 1 05 |
| Witch Hazel, 10-gal kegs, Dickenson's | gal | 1 00 |
| FAREOL. . . | oz | 50 |
| FENETOLE | lb | 2 00 |
| FERRATIN. Powder or tablets | oz | 85 |
| FLAKE WHITE. English. | lb | 15 |
| FLOUR. Gluten. . | lb | 15 |
| Rice. . . | lb | 12 |
| FLOWERS. Althea. . | lb | 40 |
| Arnica. . . | lb | 18-20 |
| Arnica, powd. . | lb | 23-25 |
| Calendula, new. . | lb | 50 |
| Chamomile, German, new. | lb | 30 |
| Chamomile, Roman | lb | 45 |
| Elder | lb | 25 |

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| | | |
|---|---|---|
| Elder, pressed. | oz | 25 |
| Kooso. | lb | 75 |
| Kooso, powd. | lb | 80 |
| Lavender. | lb | 35 |
| Mullein | lb | 1 00 |
| Orange | lb | 1 10 |
| Poppy, red. | lb | 75 |
| Rose, red. | lb | 1 20 |
| Rosemary. | lb | 35 |
| FLOUR SPAR. Powdered | lb | 25 |
| FORMALDEHYDE. Merck's. | lb | 32 |
| 1-lb bot. | lb | 30 |
| FORMALIN. S. & G. | lb | 40 |
| FORMIN. Merck's. | oz | 21 |
| GADUOL. Merck's. | oz | 37 |
| GAMBIER. | lb | 15 |
| GARANTOSE. 550 times sweeter than sugar. | | |
| 1-lb cans, Merck's | lb | 2 25 |
| 1-oz cans, Merck's | oz | 20 |
| GELATIN. Cooper's, 12-lb case | lb | 65 |
| Coxe's. | doz | 1 50 |
| French Pink. | lb | 75 |
| French Gold Label. | lb | 55 |
| French Silver Label | lb | 40 |
| GLASS. Powdered. | lb | 15 |
| Soluble. | lb | 25 |
| GLUCOSE. 1-lb bot | lb | 20 |
| GLUE. Common. | lb | 15 |
| White, No. 1. | lb | 25 |
| GLUTOL | oz | 65 |
| GLYCERINE. Price's. | lb | 70 |
| Pure, in 10-lb cans | lb | 19½ |
| Pure, in 50-lb cans | lb | 17 |
| GLYCEROPHOSPHATES. Iron, Merck's. | oz | 32 |
| Lime, Merck's. | oz | 22 |
| Potash, Merck's | oz | 29 |
| Soda, Merck's. | oz | 28 |
| GLYCYRRHIZIN. Ammoniated, Merck's. | oz | 29 |
| Ammoniated, Merck's. | lb | 3 10 |
| GOLD and Sod. Chlo., 15-gr v'ls, M.C.W. | doz | 2 70 |
| Chloride, 15-gr vials, M. C. W | doz | 5 10 |
| Mono-bromide, Merck's, 15-gr vials | ea | 1 25 |
| Tri-bromide, Merck's, 15-gr vials | ea | 1 00 |
| Tri-cyanide, Merck's, 15-gr vials | ea | 2 00 |
| GOOSE GREASE. | lb | 60 |
| GRAINS. Paradise. | lb | 40 |
| Powdered. | lb | 45 |
| GUAIACOL. Carb. | oz | 1 50 |
| Merck's. | oz | 18 |
| GUARANA. Powd. | lb | 4 50 |
| GUM. Aloes, Barbadoes | lb | 50 |
| Aloes, Barbadoes, powd | lb | 55 |
| Aloes, Cape. | lb | 20 |
| Aloes, Cape, powd | lb | 20-25 |
| Aloes, Socotrine | lb | 40 |
| Aloes, Socotrine, powd | lb | 40 |
| Ammoniac tears. | lb | 40 |
| Arabic, Turkey, first pick | lb | 55 |
| Arabic, Turkey, second pick | lb | 40 |
| Arabic, Turkey, sifted sorts. | lb | 20 |
| Arabic, first pick, granulated | lb | 58 |
| Arabic, first pick, powd' | lb | 60-65 |
| Asafoetida, Calcutta. | lb | 40 |
| Asafoetida, powd. | lb | 45 |
| Asphaltum. | lb | 15 |
| Benzoin, marble, select. | lb | 50 |
| Benzoin, powd. | lb | 55 |
| Camphor, Japanese, 1-oz blocks, 1-lb box. | lb | 1 52 |
| Camphor, bulk | lb | 1 49 |
| Camphor in slabs, 12-lb boxes | lb | 1 49 |
| Camphor, boxes 24 to lb | lb | 1 52 |
| Camphor, powd. | lb | 1 65 |
| Catechu, refined. | lb | 18 |
| Catechu, powd. | lb | 30 |
| Copal | lb | 35 |
| Damar. | lb | 38 |
| Galbanum. | lb | 1 00 |
| Gamboge | lb | 1 20 |
| Gamboge, powd. | lb | 1 25 |
| Guaiac. | lb | 35 |
| Guaiac, powd. | lb | 40 |
| Kino, true. | lb | 75 |
| Kino, true, powd | lb | 80 |
| Mastic tears. | lb | 85 |
| Myrrh, Turkey. | lb | 35 |
| Myrrh, Turkey, powd | lb | 40 |
| Olibanum tears | lb | 30 |
| Opium | lb | 5 50 |
| Opium, powd. | lb | 6 50 |
| Sandarac. | lb | 45 |
| Scammony, Aleppo. | oz | 40 |
| Scammony, Virgin, true | oz | 75 |
| Shellac, bleached. | lb | 75 |
| Shellac, orange. | lb | 70 |
| Shellac, ground. | lb | 75 |
| Spruce | lb | 1 50 |
| Tamarac, true. | lb | 1 25 |
| Thus. | lb | 12 |
| Tragacanth, ribbon. | lb | 90 |
| Tragacanth, powd. | lb | 80 |
| GUTTA PERCHA. Crude, shavings | lb | 1 75 |
| Crude, sheets. | lb | 1 75 |
| HEDONAL. | oz | 1 60 |
| HEMICRANIN | oz | 90 |
| HEMOGALLOL. Merck's. | oz | 80 |
| Tablets, Merck's. | 100 | 80 |
| HEROIN. 1-oz. | oz | 4 85 |
| 1-oz, ½-oz vials | oz | 5 00 |
| ¼-oz. | oz | 5 15 |
| 15-gr vials. | ea | 23 |
| Hydrochloride, oz vials | oz | 4 85 |
| ½-oz. | oz | 5 00 |
| ½-oz, ¼-oz vials | oz | 5 15 |
| 15-gr vials. | ea | 23 |
| HEXAMINE | oz | 30 |
| Tablets. | oz | 40 |
| HIERA PICRA. | lb | 50 |
| HOFFMAN'S ANODYNE. | lb | 75 |
| HOMATROPINE, Alk'l'd, 5-gr vials, Merck's. | ea | 2 25 |
| HOMATROPINE, Alk., 5-gr v'ls, Merck. | ea | 2 25 |
| Hydrobromate, 5-gr vials, Merck's | ea | 1 75 |
| Hydrochlorate, 5-gr vials, Merck's | ea | 2 10 |
| HOMOGLOBIN, powd., Merck's | oz | 1 04 |
| HOPS, new, bulk. | lb | 37 |
| New, ozs. | lb | 50 |
| New, ¼s, ½s. | lb | 40 |
| HYDROCHINON, Merck's. | oz | 18 |
| Merck's. | lb | 1 42 |
| HYDROGEN PEROXIDE, Drevet's U.S.P., | | |
| 1-lb bots. | doz | 3 00 |
| Drevet's U.S.P., ½-lb bots | doz | 1 90 |
| Drevet's U.S.P., ¼-lb bots | doz | 1 40 |
| Marchand's, 1-lb bots | doz | 8 00 |
| Marchand's, ½-lb bots | doz | 5 25 |
| Marchand's, ¼-lb bots | doz | 3 80 |
| Marchand's, ⅛-lb bots | doz | 2 25 |
| M. C. W., 1-lb bots | doz | 3 00 |
| M. C. W., ½-lb bots | doz | 1 80 |
| M. C. W., ¼-lb bots | doz | 1 20 |

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| | | | |
|---|---|---|---|
| Oakland, 1-lb bots | doz | 6 | 50 |
| Oakland, ½-lb bots | doz | 4 | 00 |
| Oakland, ¼-lb bots | doz | 2 | 25 |
| Oakland, 5-lb bots | ea | 1 | 59 |
| HYDRO NAPHTHOL. | oz | | 75 |
| HYDRASTINE, Alkaloid, Merck's | oz | 10 | 04 |
| Hydrochloride, Merck's. | oz | 10 | 04 |
| HYDRASTININE, Hydrochloride, Merck's, 15-gr vials. | ea | 2 | 10 |
| HYDROQUINONE, Merck's. | oz | | 18 |
| HYOSCINE, Amorphous, Merck's, 15-gr vials. | ea | 2 | 00 |
| Hydrobromate, 5-gr vials, Merck's | ea | 2 | 00 |
| Hydriodide, 5-gr vials, Merck's | ea | 2 | 00 |
| Sulphate, 5-gr vials, Merck's | ea | 2 | 00 |
| HYOSCYAMINE, Alkaloid, crys., Merck's, 15-gr vials. | ea | 4 | 75 |
| Amorphous, Merck's. | gr | | 25 |
| Hydrobromate, Amorph., Merck's, 15-gr. | ea | 3 | 00 |
| Sulphate, crys., Merck's, 15-gr | ea | 3 | 03 |
| Sulphate, Amorph., 5-gr vials, Merck's | ea | 1 | 25 |
| IATROL. | oz | | 95 |
| ICHTHARGAN, Merck's. | oz | 3 | 00 |
| ICHTHOFORM, Merck's. | oz | 1 | 00 |
| ICHTHYOL, 1-oz vials, Merck's | oz | | 32 |
| ¼s, Merck's. | oz | 4 | 25 |
| ½s, Merck's. | oz | 4 | 10 |
| 1s, Merck's. | oz | 4 | 00 |
| INDIGO, Manila, extra | lb | | 75 |
| IODIPIN (10% Iodized Sesame oil), Merck's. | oz | | 28 |
| IODINE, Bromide, 1-oz vials, M.C.W | oz | | 47 |
| Chloride, 1-oz vials, M.C.W | oz | | 52 |
| Resublimed, 1-oz vials, M. C. W | oz | | 35 |
| Resublimed, M. C. W | lb | 3 | 53 |
| Burnham's, soluble. | oz | 1 | 00 |
| IODOFORM, bulk, M. C. W | lb | 3 | 85 |
| Cryst. or powd., Merck's | oz | | 34 |
| Deodorized. | oz | | 54 |
| IODOL. | oz | 1 | 25 |
| IRON, Acetate, dry, 1-oz vials, M.C.W | oz | | 24 |
| Acetate, liquor. | lb | | 44 |
| Albuminate. | oz | | 20 |
| Ammoniated, M. C. W | lb | | 44 |
| And Ammonium Cit., Merck's | lb | | 79 |
| Arseniate, 1-oz vials. | oz | | 18 |
| By Hydrogen, Merck's | lb | | 58 |
| Carbonate, precipitated. | lb | | 18 |
| Carbonate, proto. | lb | | 42 |
| Carbonate, saccharated. | lb | | 45 |
| Chloride, 1-oz vials | oz | | 8 |
| Chloride, crystal. | lb | | 34 |
| Chloride, sol. for tincture | pt | | 35 |
| Citrate, soluble, 1-oz vials | oz | | 11 |
| Citrate, soluble, M. C. W | lb | | 80 |
| Citrate and Quinine, sol., M. C. W | lb | 2 | 00 |
| Citrate and Quinine with Strych., M.C.W. | lb | 2 | 55 |
| Citrate and Quinine with Strych., M.C.W. | oz | | 26 |
| Citrate and Strychnine, 1-oz vials, M.C.W. | oz | | 13 |
| Ferrocyanide, 1-oz vials, M. C. W | oz | | 10 |
| Ferrocyanide, M. C. W | lb | | 65 |
| Filings | lb | | 16 |
| Glycerino Phosphate. | oz | | 32 |
| Hypophosphite, 1-oz vials, M. C. W | oz | | 20 |
| Iodide, 1-oz vials, M. C. W | oz | | 36 |
| Lactate, 1-oz vials, M. C. W | oz | | 10 |
| Lactophosphate, 1-oz vials, M. C. W | oz | | 19 |
| Nitrate, sol., U. S. P., M. C. W | lb | | 34 |
| Oxide, black. | lb | | 49 |
| Oxide, brown, com'l, Merck's | lb | | 22 |
| Oxide, brown, pure, Merck's | lb | | 74 |
| Peptonized, Merck's. | oz | | 24 |
| Phosphate, precipitate. | lb | | 39 |
| Phosphate, U. S. P., scales | oz | | 11 |
| Phosphate, U. S. P., scales | lb | | 65 |
| Pyrophosphate, soluble, Merck's | lb | | 77 |
| Pyrophosphate, U. S. P., 1880 | oz | | 11 |
| Pyrophosphate, U. S. P., 1880 | lb | | 77 |
| Reduced (Quevenne's) | lb | | 58 |
| Reduced (Quevenne's) | oz | | 10 |
| Salicylate, 1-oz vials, M. C. W | oz | | 15 |
| Subsulphate, M. C. W | oz | | 6 |
| Subsulphate, M. C. W | lb | | 36 |
| Subsulphate, sol., M. C. W | lb | | 23 |
| Succinate, Merck's. | oz | | 54 |
| Sulphate, dried. | lb | | 20 |
| Sulphate, gran., pure | lb | | 18 |
| Sulphate, pure, cryst., M. C. W | lb | | 20 |
| Sulpho-Carbolate, 1-oz vials, M. C. W | oz | | 13 |
| Tannate, 1-oz vials, M. C. W | oz | | 22 |
| Tartrate and Ammonia, M. C. W | oz | | 11 |
| Tartrate and Ammonia, M. C. W | lb | | 72 |
| Tartrate and Potassium, M. C. W | oz | | 10 |
| Tartrate and Potassium, scale, M. C. W | lb | | 58 |
| Tersulphate, sol., U. S. P | lb | | 40 |
| Valerianate. | oz | | 22 |
| IODOTHYRINE. | oz | 3 | 40 |
| ISINGLASS, American. | lb | 1 | 25 |
| Russian. | lb | 5 | 25 |
| KAMALA. | lb | | 65 |
| Powd. | lb | | 75 |
| KAOLIN | lb | | 10 |
| KERATIN (Pepsinized), Merck's, ⅛s | oz | 3 | 53 |
| KOUSSO. | lb | | 75 |
| Powd | lb | | 75 |
| KRYOFINE. | oz | 1 | 00 |
| LACTUCARIUM, Merck's. | oz | | 54 |
| LACTOPHEPIN. | oz | 1 | 00 |
| LANOLIN. | lb | | 80 |
| Lanae Adeps, 1-lb cans, B. J. D | lb | | 35 |
| Lanae, British. | lb | | 35 |
| LANUM (Adeps Lanae Hydrosus), Merck's. | lb | | 40 |
| LARD, Benzoated, 5-lb cans | lb | | 28 |
| LARGIN, Merck's | oz | 1 | 75 |
| LEAD, Acetate, med. crys. or gran., Merck's. | lb | | 33 |
| Acetate, white. | lb | | 18 |
| Acetate, white, powd | lb | | 25 |
| Acetate, purified, gran., 1-lb cart., M.C.W. | lb | | 33 |
| Bromide. | oz | | 24 |
| Carbonate | lb | | 12 |
| Chloride, 1-oz vials | oz | | 11 |
| Chromate, M. C. W | lb | 1 | 19 |
| Iodide, 1-oz vials, M. C. W | oz | | 27 |
| Nitrate, 1-lb boxes, M. C. W | lb | | 23 |
| Nitrate, chemically pure, M. C. W | lb | | 40 |
| Oxide, chemically pure, M. C. W | lb | | 84 |
| Oxide, Merck's. | lb | | 84 |
| Subacetate, sol. | lb | | 35 |
| Sulphate, pure, M. C. W | lb | | 63 |
| Tannate, 1-oz vials, M. C. W | oz | | 24 |
| LEAVES, Aconite, German | lb | | 30 |
| Aconite, powd. | lb | | 30 |
| Aconite, pressed. | oz | | 25 |
| Angelica, pressed. | oz | | 25 |
| Bay, bulk. | lb | | 15 |
| Belladonna, English, bts | lb | 1 | 25 |
| Belladonna. | lb | | 30 |
| Belladonna, powd. | lb | | 35 |
| Belladonna, pressed. | oz | | 35 |

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| | | |
|---|---|---|
| Blessed Thistle, pressed | oz | 34 |
| Borage, pressed. | oz | 35 |
| Buchu, long. | lb | 55 |
| Buchu, short. | lb | 40 |
| Buchu, powd. | lb | 40 |
| Buckbean, pressed | oz | 30 |
| Cocoa | lb | 45 |
| Conium. | lb | 30 |
| Conium, powd. | lb | 35 |
| Conium, pressed. | oz | 30 |
| Coltsfoot, pressed. | oz | 25 |
| Damiana | lb | 30 |
| Digitalis, pressed. | oz | 35 |
| Digitalis. | lb | 35 |
| Digitalis, powd. | lb | 35 |
| Eucalyptus. | lb | 20 |
| Grindelia Robusta | lb | 25 |
| Grindelia Squarosa | lb | 40 |
| Hemlock, pressed. | oz | 30 |
| Henna. | lb | 50 |
| Henna, powd. | lb | 55 |
| Henbane. | lb | 30 |
| Henbane, powd. | lb | 30 |
| Henbane, pressed, oz | lb | 30 |
| Jaborandi. | lb | 35 |
| Jaborandi, powd. | lb | 40 |
| Laurel. | lb | 25 |
| Lovage, pressed, oz | lb | 30 |
| Lungwort, pressed, oz | lb | 34 |
| Marjoram, sweet | lb | 36 |
| Rosemary, bulk. | lb | 20 |
| Rosemary, pressed, oz | lb | 23 |
| Sage, oz. | lb | 25 |
| Savin, pressed, oz | lb | 25 |
| Senna, Alexandria, garbeled | lb | 30 |
| Senna, Alexandria, powd. | lb | 30 |
| Senna, Tinnevelly, select | lb | 25 |
| Stramonium, powd. | lb | 30 |
| Stramonium, pressed, oz | lb | 24 |
| Thyme, pressed, oz | lb | 24 |
| Uva, Ursi. | lb | 20 |
| Witch Hazel, pressed, oz | lb | 23 |
| LEECHES. | ea | 10 |
| 2 dozen lots | ea | 8 |
| LEPTANDRIN. | oz | 35 |
| LIME, Chloride, 35-lb cans | lb | 5 |
| Chloride, in bbls of 350 lbs | lb | 2¼ |
| Chloride, lb cans | doz | 90 |
| Chloride, ½-lb cans | doz | 65 |
| Chloride, ¼-lb cans | doz | 45 |
| LITHARGE. | lb | 12 |
| LITHIUM, Benzoate, 1-oz vials, M. C. W. | oz | 16 |
| Bromide, Merck's. | oz | 24 |
| Bromide, 1-oz vials, M. C. W | oz | 24 |
| Carbonate, Merck's. | oz | 20 |
| Citrate, 1-oz vials, M. C. W | oz | 18 |
| Citrate, cryst. or powd., Merck's | oz | 18 |
| Iodide, Merck's. | oz | 38 |
| Salicylate, 1-oz vials, M. C. W | oz | 16 |
| LITMUS. | lb | 50 |
| Paper. | doz | 50 |
| LODESTONE. | lb | 75 |
| LONDON PURPLE. | lb | 20 |
| LOSOPHAN. | oz | 1 80 |
| LUPULIN, German. | lb | 75 |
| LYCOPODIUM. | lb | 75 |
| LYCETOL. | oz | 4 25 |
| LYSOL, 1-gal. jugs | gal | 4 00 |
| Pints. | doz | 8 00 |
| MACE | lb | 75 |
| Powd. | lb | 75 |
| MADDER, Dutch. | lb | 15 |
| MAGNESIUM, Benzoate, Mallinckrodt's | oz | 24 |
| Bromide, Mallinckrodt's. | oz | 25 |
| Calcined, Jennings', 1-lb cans | lb | 85 |
| Calcined, K. & M.'s, 1-lb cans | lb | 75 |
| Calcined, K. & M.'s, heavy | lb | 80 |
| Carbonate, Jennings', 2-oz | lb | 35 |
| Carbonate, Jennings', 4-oz | lb | 35 |
| Carbonate, K. & M.'s, 1-oz | lb | 27 |
| Carbonate, K. & M.'s, 2-oz | oz | 23 |
| Carbonate, K. & M.'s, 4-oz | lb | 23 |
| Carbonate, K. & M.'s, small sq | lb | 60 |
| Carbonate, powd., in 65-lb bbls | lb | 13 |
| Carbonate, powd., in 10-lb boxes | lb | 16 |
| Citrate, dry, English | lb | 65 |
| Citrate, sol. | doz | 1 75 |
| Glycerinophosphate, Merck's | oz | 44 |
| Hypophosphite, 1-oz vials, M. C. W | oz | 20 |
| Hypophosphite, M. C. W | lb | 1 69 |
| Hypophosphite, Merck's. | oz | 20 |
| Iodide, M. C. W | oz | 47 |
| Sulphite, Mallinckrodt's | lb | 49 |
| MANGANESE, Black, Oxide | lb | 8-10 |
| Phosphate, M. C. W | oz | 18 |
| Carbonate, 1-oz vials, M. C. W | oz | 14 |
| Chloride, 1-oz vials, M. C. W | oz | 14 |
| Hyposphite, 1-oz vials, M. C. W. | oz | 20 |
| Hypophosphite, Merck's | oz | 20 |
| Iodide, 1-oz vials, M. C. W | oz | 47 |
| Peptonized, Merck's. | oz | 29 |
| Phosphate, M. C. W | oz | 18 |
| Sulphate, 1-oz vials, M. C. W | oz | 9 |
| MANNA, Large flake | lb | 90 |
| Small flake. | lb | 60 |
| MENTHOL. | oz | 35 |
| Cryst., 1-oz vials, Mallinckrodt's | oz | 35 |
| Crystallized. | lb | 3 85 |
| MERCURY, Chloride, Merck's | lb | 99 |
| Ammoniate,d white precip. | lb | 1 25 |
| Bisulphate. | lb | 75 |
| Cyanide | oz | 31 |
| Iodide, Green, Merck's | oz | 24 |
| Iodide, green, 1-oz vials, M. C. W | oz | 24 |
| Iodide, Red, Merck's | oz | 26 |
| Iodide, red, 1-oz vials, M. C. W | oz | 26 |
| Iodide, Yellow, Merck's | oz | 24 |
| Iodide, yellow, 1-oz vials, M. C. W | oz | 24 |
| Nitrate, proto., 1-oz vials, M. C. W | oz | 27 |
| Nitrate, solution, 1-oz vials | oz | 27 |
| Oxide, black, 1-oz vials | oz | 18 |
| Oxide, red (red precip.) | lb | 1 20 |
| Oxide, yellow, 1-oz vials | oz | 18 |
| Salicylate, M. C. W | oz | 27 |
| Subsulphate, 1-oz vials. | oz | 15 |
| Subsulphate. | lb | 1 06 |
| Sulphuret, black. | lb | 78 |
| With Chalk, 1-lb cartons | lb | 50 |
| METHYL, SALICYLATE. | lb | 80 |
| METHYLENE, Blue Medicinal, Merck's | oz | 45 |
| MILK SUGAR, Cryst | lb | 30 |
| Powdered, bulk | lb | 23 |
| M. C. W., 1-lb cartons | lb | 30 |
| MORPHINE. Sulphate, ⅛s, 1-oz box, M. C. W. | oz | 3 25 |
| Sulphate, ⅛s, 2½-oz box, M.C.W | oz | 3 20 |
| Sulphate, 1-oz vials, M.C.W | oz | 3 00 |
| Sulphate, 5-oz can, M.C.W | oz | 2 95 |
| In 10-oz lots, 10c oz less. | | |
| Morphia, Acetate, ⅛s, M.C.W | oz | 3 45 |

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| | | |
|---|---|---|
| Morphia, Muriate, ⅛s, M.C.W | oz | 3 45 |
| Morphia, Valerianate, ⅛s, M.C.W | oz | 4 45 |
| Other salts or Morphine subject to market price based on above. | | |
| MOSS, Iceland. | lb | 18 |
| Irish. | lb | 15 |
| Irish, bleached. | lb | 20 |
| MUSK, Chinese. | oz | 40 |
| Tonquin, grain. | dr | 3 00 |
| MUSTARD, Colman's, 4-oz cans | doz | 1 75 |
| Colman's, 16-lb cans | lb | 50 |
| Yellow, Imperial, 5-lb cans | lb | 18 |
| NAPHTHALIN, Balls. | lb | 5-7 |
| Resublimated, Merck's. | lb | 27 |
| Pure, 1-lb cartons, M. C. W | lb | 27 |
| NAPHTHOL, Alpha. | oz | 30 |
| Beta. | oz | 10 |
| NICKEL, Bromide, Merck's | oz | 32 |
| Bromide, 1-oz vials, M.C.W | oz | 29 |
| Nickel and Ammonia Sulphate, M. C. W | lb | 34 |
| Sulphate, 1-oz vials, M. C. W | oz | 10 |
| Sulphate, Merck's. | oz | 10 |
| NOSOPHEN. | doz | 4 50 |
| NUTGALLS, Aleppo. | lb | 30 |
| Aleppo, ground. | lb | 35 |
| Aleppo, powd. | lb | 35 |
| NUTMEGS, Macassar, large | lb | 60 |
| Penang, powd. | lb | 65 |
| NUTS, Areca | lb | 30 |
| Areca, powd. | lb | 40 |
| Kola. | lb | 35 |
| Kola, powd. | lb | 40 |
| NUX VOMICA. | lb | 25 |
| Powdered or rasped | lb | 25 |
| OAKUM | lb | 15 |
| Surgeon's. | lb | 20 |
| OIL, Almonds, Bitter, true, Merck's | lb | 6 59 |
| Almonds, Bitter, Allen's | oz | 75 |
| Almonds, Sweet, Allen's | lb | 75 |
| Almonds, Sweet. | lb | 45-60 |
| Amber, rectified. | lb | 60 |
| Anise. | lb | 2 00-2 25 |
| Bay Leaves, true | oz | 40 |
| Bay Leaves. | lb | 4 00-4 25 |
| Benne | gal | 1 20 |
| Bergamot | lb | 4 00-4 25 |
| Birch Tar, rectified | lb | 1 25 |
| Cade | lb | 50 |
| Cajuput (21-oz bottles) | lb | 1 10-1 35 |
| Calamus. | oz | 45 |
| Camphor, E. I. | lb | 45 |
| Caraway, seed. | lb | 2 25 |
| Cardamon. | oz | 2 50 |
| Cassia | lb | 1 75-2 00 |
| Castor, Baker's A. A | gal | 1 38-1 50 |
| Castor, Marsh's. | | 1 34-1 45 |
| Castor, 2-oz bottles | doz | 85 |
| Castor, 4-oz bottles | doz | 1 25 |
| Castor, 6-oz bottles | doz | 1 75 |
| Castor, 8-oz bottles | doz | 2 25 |
| Castor, 12-oz bottles | doz | 2 50 |
| Castor, 16-oz bottles | doz | 3 75 |
| Cedar | lb | 60-100 |
| Cedrat. | oz | 40 |
| Celery. | oz | 1 40 |
| Chamomile, German. | oz | 5 00 |
| Chamomile, Roman. | oz | 1 75 |
| China, Nut. | gal | 1 00 |
| Cinnamon, Ceylon. | oz | 90 |
| Citronella. | lb | 75-90 |

| | | |
|---|---|---|
| Cloves | lb | 1 75-2 00 |
| Cocoanut | lb | 20-25 |
| Codliver, White, Norwegian | gal | 1 75 |
| Codliver, white, Norwegian, 5-gal cans | gal | 1 60 |
| Codliver, white, Newfoundland | gal | 1 40 |
| Cognac, green. | oz | 2 50 |
| Cologne. | oz | 50 |
| Copaiba | lb | 1 75 |
| Coriander. | oz | 90 |
| Cotton Seed (salad), 5-gal can | gal | 1 05 |
| Cotton Seed (salad), 1-gal can | gal | 1 35 |
| Croton, 24-oz bots | lb | 1 35-1 50 |
| Croton | oz | 20 |
| Cubebs. | lb | 1 60-1 70 |
| Ergot, Keith's. | oz | 57 |
| Erigeron, Keith's. | oz | 38 |
| Erigeron. | lb | 1 60 |
| Eucalyptus. | lb | 80 |
| Fennel Seed. | lb | 2 00 |
| Fusil, purified. | lb | 80 |
| Geranium, Rose, Chris | oz | 75 |
| Hemlock. | lb | 65 |
| Hydrocarbon. | gal | 1 25 |
| Jasmin, alcoholic. | lb | 3 00 |
| Juniper Berries. | lb | 1 25-1 50 |
| Juniper, wood. | lb | 75 |
| Lard. | gal | 1 10 |
| Laurel, expressed. | lb | 60 |
| Lavender, Flowers. | lb | 3 50 |
| Lavender, Garden. | lb | 1 25 |
| Lemon | lb | 2 00-2 25 |
| Lemon, Sanderson's. | lb | 2 45 |
| Lemon Grass. | lb | 4 00 |
| Linseed, raw | gal | 70 |
| Linseed, raw, case | gal | 63 |
| Linseed, boiled | gal | 70 |
| Linseed, boiled, case | gal | 65 |
| Mace, expressed. | lb | 1 75 |
| Male Fern, ethereal. | oz | 35 |
| Myrbane. | lb | 40 |
| Mullein | oz | 45 |
| Musk, alcoholic. | oz | 1 00 |
| Mustard, essential. | oz | 50 |
| Mustard, expressed. | gal | 90 |
| Neatsfoot, No. 1. | gal | 90 |
| Neroli, Petal. | oz | 3 00 |
| Neroli, Bigarade. | oz | 5 75 |
| Neroli, Petit Grain. | oz | 55 |
| Nutmegs, essential. | oz | 35 |
| Olive, pure, Malaga | gal | 1 25 |
| Olive, California. | gal | 3 00 |
| Olive, small | doz | 3 75 |
| Olive, ½-gals. | gal | 3 25 |
| Olive, large. | doz | 7 50 |
| Olive, imported. | gal | 2 00-2 10 |
| Orange, bitter. | lb | 4 50 |
| Orange, sweet. | lb | 3 00 |
| Origanum, pure. | lb | 60 |
| Origanum, Chris. | lb | 1 85 |
| Palm. | lb | 25 |
| Patchouly | oz | 75 |
| Pennyroyal | lb | 4 00 |
| Pepper, black. | oz | 20 |
| Peppermint, Hotchkiss | lb | 3 25-3 50 |
| Peppermint, Wayne Co. | lb | 2 75-3 00 |
| Peppermint, Western | lb | 2 75-3 00 |
| Pimento. | oz | 30 |
| Pinus, Sylvestris, German. | lb | 1 50 |
| Pinus, Pumilio. | lb | 4 50 |
| Pinus Pumilio. | oz | 40 |

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| | | |
|---|---|---|
| Rhodium | oz | 35 |
| Rose, Kizanlik. | oz | 5 75 |
| Rosemary, flowers. | lb | 1 25-1 50 |
| Rue | oz | 40 |
| Sandalwood, English. | lb | 5 50 |
| Sandalwood, German. | lb | 3 00-3 20 |
| Sassafras. | lb | 90-1 00 |
| Savin. | lb | 1 75 |
| Spearmint. | lb | 4 00 |
| Sperm | gal | 1 00 |
| Spike. | lb | 35 |
| Spruce | lb | 85 |
| Tansy. | lb | 4 75 |
| Tar | lb | 25 |
| Thyme, white. | lb | 1 50 |
| Turpentine, pure. | lb | 55 |
| Wine, light. | oz | 40 |
| Wine, heavy. | oz | 50 |
| Wintergreen | lb | 3 75-4 00 |
| Wormseed | lb | 3 75-4 00 |
| Wormwood. | lb | 4 00-4 25 |
| Ylang Ylang. | oz | 4 50 |
| OINTMENT, Basilicon. | lb | 65 |
| Citrine. | lb | 65 |
| Iodine | lb | 1 25 |
| Mercurial, ½ m. | lb | 65 |
| Mercurial, ⅓ m. | lb | 55 |
| Stramonium. | lb | 75 |
| Tar | lb | 50 |
| Zinc, benzoated. | lb | 65 |
| Zinc, oxide. | lb | 65 |
| OPIUM, powd., Merck's | lb | 6 50 |
| ORTHOFORM. | oz | 1 40 |
| PANCREATIN, Merck's, pure | oz | 44 |
| Pure, scales, P. D. & Co | oz | 50 |
| PAPAIN, Boehringer. | oz | 75 |
| Merck's. | oz | 60 |
| PARAFFINE, refined. | lb | 12-15 |
| PARALDEHYDE, Merck's. | lb | 99 |
| Merck's. | oz | 14 |
| PARIS GREEN. | lb | 38-42 |
| PASTILLES, Fumigating, black | lb | 50 |
| Fumigating, red | lb | 50 |
| PEARL ASH. | lb | 8-10 |
| PEEL, Orange, sweet, ground | lb | 25 |
| Orange, bitter, coarse | lb | 20 |
| Orange, bitter, powdered | lb | 25 |
| Orange, sweet, quarters | lb | 20 |
| PELLETIERINE, Sulphate, Merck's, 15-gr vial | | 1 75 |
| Tannate, Merck's, 15-gr vial | | 40 |
| PEPPER, black, Singapore, sifted | lb | 30 |
| Black, powd. | lb | 30 |
| White. | lb | 40 |
| White, powd. | lb | 40 |
| PEPSIN, pure, U. S. P | lb | 4 50 |
| Powd. or scales. | lb | 4 50 |
| Powd., Ph. G. III | oz | 25 |
| PEPTONE, Merck's, dry, from meat | oz | 34 |
| PETROLATUM, 1-lb cans | doz | 2 00 |
| 50-lb pails. | lb | 7 |
| 25-lb pails. | lb | 7½ |
| 10-lb cans. | lb | 9 |
| 5-lb cans. | lb | 10 |
| Snow White, 50-lb pails | lb | 15½ |
| Snow White, 25-lb pails | lb | 16½ |
| Snow White, 10-lb cans | lb | 18 |
| Snow White, 5-lb cans | lb | 25 |
| Snow White, 1-lb cans | lb | 30 |
| PHENACETINE. | oz | 33 |
| PHENILINE. | oz | 1 00 |

| | | |
|---|---|---|
| PHENOLPHTHALEIN | oz | 34 |
| PHOSPHORUS, 1-lb cans | lb | 85 |
| ½-lb cans | lb | 95 |
| ¼-lb cans | lb | 1 05 |
| Amorphous. | lb | 1 44 |
| PIPERAZIN, Schering's 10-gm vials | bot | 1 50 |
| ½-oz and 1-oz | oz | 4 25 |
| PIPERIN, 1-oz vials, Mallinckrodt's | oz | 62 |
| Merck's. | oz | 62 |
| PIPE CLAY. | lb | 12 |
| PITCH, Burgundy. | lb | 12 |
| PITH, Sassafras. | lb | 1 50 |
| PLATINUM and Barium Cyanide, cr., Merck. | gr | 14 |
| And Potassium Chloride, M'k's, 15-gr vials | ea | 75 |
| Chloride, Merck's | oz | 18 00 |
| Chloride, solution, 10%, Merck's | oz | 2 57 |
| PODOPHYLLIN | oz | 30 |
| POPPY HEADS, German. | lb | 30 |
| POTASH, Babbitt's, 4 doz in case | case | 3 40 |
| Caustic, pure, by alcohol | lb | 60 |
| Caustic, white. | lb | 37 |
| Caustic, 10-lb cans | lb | 10-12 |
| Solution (liq. potass.) | lb | 35 |
| POTASSIUM, Acetate, Merck's, 1-lb bot. | lb | 42 |
| Acetate, M. C. W., 1-lb | lb | 42 |
| Antimonate, Merck's. | lb | 1 09 |
| Arseniate, 1-oz vials, Merck's | oz | 14 |
| Bicarbonate, cryst., M. C. W | lb | 20 |
| Bicarbonate, cryst., H. P., Merck's | lb | 34 |
| Bicarbonate, granulated, M. C. W | lb | 20 |
| Bicarbonate, powd. | lb | 20 |
| Bichromate | lb | 18-20 |
| M. C. W. | lb | 34 |
| Bromide, crys. or gran., 5-lb bxs, M.C.W. | lb | 32 |
| Carbonate, purified, M. C. W | lb | 41 |
| Carbonate, bulk. | lb | 15 |
| Caustic, pure, Merck's | lb | 37 |
| Caustic, C. P., Merck's | lb | 2 59 |
| Chlorate, cryst. | lb | 16-18 |
| Chlorate, gran., pure, M. C. W | lb | 22 |
| Chlorate, powd. | lb | 16-18 |
| Chromate, yellow, neutral. | lb | 40 |
| Chromate, yellow, H. P., Merck's | lb | 69 |
| Citrate, M. C. W | lb | 72 |
| Citrate, H. P., Merck's | lb | 1 19 |
| Cyanide, fused, M. C. W | lb | 45 |
| Cyanide, C. P. 99% | lb | 52 |
| Cyanide, Miner's, 10-lb tin | lb | 28 |
| Ferricyanide, chem. pure, M. C. W | lb | 1 04 |
| Ferrocyanide, pure, Merck's | lb | 59 |
| Glycerinophosphate | oz | 26 |
| Hypophosphite, purified, Merck's | lb | 1 14 |
| Hypophosphite, M. C. W | lb | 99 |
| Iodide, M. C. W., 1-lb boxes | lb | 2 65 |
| Nitrate, cryst. | lb | 10-12 |
| Nitrate, granulated. | lb | 10-12 |
| Nitrate, chemically pure, M. C. W | lb | 30 |
| Oxalate, neutral. | lb | 28 |
| Permanganate, cryst., 1-oz vials | oz | 8 |
| Penmanganate, large cryst., pure, M.C.W. | lb | 34 |
| Permanganate, small cryst | lb | 25 |
| Phosphate, 1-oz vials | oz | 11 |
| Phosphate | lb | 64 |
| Prussiate, red. | lb | 65 |
| Prussiate, yellow. | lb | 35 |
| Sulphate, cryst. or powd | lb | 16 |
| Sulphate, chemically pure | lb | 60 |
| Sulphide (Liver Sulphur) | lb | 24 |

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| | | |
|---|---|---|
| Sulphurated, Merck's. | lb | 25 |
| Tartrate (soluble Tartar) | lb | 59 |
| POWDER, Antimonial. | lb | 85 |
| Aromatic. | lb | 1 25 |
| Carbolic Acid, disinfecting | doz | 1 50 |
| Chalk, aromatic. | lb | 75 |
| Chalk, compound. | lb | 75 |
| Chalk and Opium. | lb | 2 50 |
| Composition, 2-oz papers | lb | 35 |
| Dover's | lb | 1 50 |
| Insect, Buhach, 6-lb cans | lb | 60 |
| Insect, Dalmatian. | lb | 25-30 |
| Insect, Mrs. Hill's, 6-lb cans | lb | 35 |
| Jalap, comp. | lb | 1 00 |
| Licorice, comp. | lb | 25 |
| Licorice, comp., 2-oz packages | doz | 75 |
| Rhubarb, comp. | lb | 1 50 |
| Tooth. | lb | 50 |
| PROPYLAMIN, 10% solution, Merck's | oz | 55 |
| Hydrochlorate, 1/8-oz vials. | oz | 3 50 |
| PROTARGOL. | oz | 1 25 |
| PULVIS ANTIMONIALIS. | lb | 85 |
| PYOKTANIN, Blue or Yellow, Merck's | oz | 1 50 |
| PYRIDINE, Merck's. | oz | 32 |
| QUICKSILVER. | lb | 80 |
| QUINACETINE. | oz | 85 |
| QUINALGIN. | oz | 1 25 |
| QUININE, Alkaloid, 1-oz vials, M.C.W. | oz | 60 |
| Bisulphate, 1-oz vials, M.C.W | oz | 28 |
| Bisulphate, 5-oz cans, M.C.W | oz | 26 |
| Citrate, 1-oz vials, M.C.W | oz | 57 |
| Muriate, 1-oz vials, M.C.W | oz | 51 |
| Phosphate, 1-oz vials, M.C.W | oz | 55 |
| Salicylate, 1-oz vials, M.C.W | oz | 54 |
| Sulphate, 1-oz cans, M.C.W | oz | 28 |
| Sulphate, 5-oz cans, M.C.W | oz | 25 |
| Sulphate, 25-oz cans, M.C.W | oz | 21 |
| Sulphate, 50-oz cans, M.C.W | oz | 20 |
| Sulphate, 100-oz cans, M.C.W | oz | 18 |
| Tannate, Neutral, Merck's. | oz | 38 |
| Tannate, 1-oz vials, M.C.W | oz | 37 |
| Valerianate, 1-oz vials, M.C.W | oz | 57 |
| QUINOLINE, Merck's | oz | 45 |
| Tartrate, Merck's | oz | 45 |
| RED SAUNDERS. | lb | 12 |
| RESIN, Jalap, Merck's | oz | 54 |
| Copaiba. | lb | 1 50 |
| Scamony | oz | 40 |
| RESORCIN, cryst., Merck's | oz | 18 |
| Resublimed, H. P., Merck's | oz | 66 |
| M. C. W | lb | 1 50 |
| M. C. W | oz | 19 |
| ROOT, Abscess, pressed, lb. | lb | 40 |
| Aconite, powd | lb | 35 |
| Aconite, pressed | lb | 32 |
| Alkanet | lb | 25 |
| Alkanet, powd | lb | 30 |
| Angelica, pressed | lb | 20 |
| Angelica, powd | lb | 25 |
| Arnica, pressed | lb | 35 |
| Belladonna, pressed, lb. | lb | 25 |
| Belladonna, powd | lb | 28 |
| Berberis Aquif, pressed, lb. | lb | 35 |
| Beth, pressed, lb | lb | 30 |
| Beth, powd | lb | 35 |
| Blackberry, pressed, lb. | lb | 30 |
| Blood, pressed, lb. | lb | 30 |
| Blood, powd | lb | 35 |
| Blue Flag, pressed | lb | 25 |
| Burdock, pressed, lb. | lb | 25 |

| | | |
|---|---|---|
| Burdock, powd | lb | 25 |
| Calamus, peeled | lb | 30 |
| Calamus, white, peeled and split | lb | 50 |
| Calamus, powd | lb | 35 |
| Cohosh, black, pressed. | lb | 25 |
| Cohosh, black, powd. | lb | 25 |
| Cohosh, blue, pressed, lb | lb | 25 |
| Cohosh, blue, powd | lb | 25 |
| Colchicum | lb | 28 |
| Colchicum, powd | lb | 35 |
| Columbo, foreign. | lb | 25 |
| Columbo, powd | lb | 25 |
| Comfrey, pressed, lb. | lb | 25 |
| Comfrey, powd | lb | 25 |
| Cranesbill, pressed, lb | lb | 25 |
| Culvers, pressed, lb | lb | 25 |
| Culvers, powd | lb | 30 |
| Dandelion, Am., pressed, lb | lb | 35 |
| Dandelion, powd. | lb | 38 |
| Dwarf Elder, pressed, lb | lb | 35 |
| Elecampane, pressed, lb. | lb | 25 |
| Elecampane, powd | lb | 20 |
| Gelsemium, pressed, lb | lb | 21 |
| Gelsemium, powd | lb | 25 |
| Gentian | lb | 16 |
| Gentian, ground | lb | 20 |
| Gentian, powd | lb | 20 |
| Ginger, African. | lb | 17 |
| Ginger, African, powd | lb | 18 |
| Ginger, Jamaica, bleached. | lb | 27 |
| Ginger, Jamaica, bleached, powd | lb | 30 |
| Ginseng | lb | 8 50-10 00 |
| Golden Seal. | lb | 1 75 |
| Golden Seal, pressed. | lb | 1 75 |
| Golden Seal, powd. | lb | 1 75 |
| Hellebore, black, pressed | lb | 20 |
| Hellebore, black, powd | lb | 25 |
| Hellebore, white, pressed, lb | lb | 22 |
| Hellebore, white, powd | lb | 25 |
| Indian Hemp, black, pressed, lb | lb | 35 |
| Indian Hemp, black, powd | lb | 40 |
| Indian Hemp, white, pressed | lb | 25 |
| Indian Hemp, white, powd | lb | 30 |
| Ipecac, Rio, powd | lb | 2 50 |
| Jalap | lb | 30 |
| Jalap, powd | lb | 35 |
| Kava Kava | lb | 50 |
| Ladies' Slipper, pressed, lb | lb | 28 |
| Licorice, select | lb | 16 |
| Licorice, pipestem | lb | 18 |
| Licorice, cut, Russian | lb | 20 |
| Licorice, powd | lb | 16-20 |
| Mandrake, pressed, lb | lb | 30 |
| Mandrake, powd | lb | 35 |
| Marshmallow, cut | lb | 34 |
| Marshmallow, powd | lb | 35 |
| Musk | lb | 30 |
| Orris, Florentine | lb | 25 |
| Orris, Florentine, Fingers | lb | 1 25 |
| Orris, Florentine, granulated | lb | 35 |
| Orris, Florentine, powd | lb | 30 |
| Pareira Brava, pressed | lb | 34 |
| Pink. | lb | 85 |
| Pink, powd. | lb | 90 |
| Pleurisy, pressed | lb | 25 |
| Poke, pressed | lb | 15 |
| Poke, powd | lb | 20 |
| Pond Lily, white, pressed | lb | 40 |
| Pond Lily, white, powd | lb | 40 |
| Pond Lily, yellow, pressed | lb | 30 |

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| | | |
|---|---|---|
| Pond Lily, yellow, powd | lb | 35 |
| Rhatany | lb | 30 |
| Rhatany, powd | lb | 35 |
| Rhubarb, East India | lb | 75 |
| Rhubarb, East India, powd | lb | 75 |
| Rhubarb, cut in cubes, No. 1 | lb | 1 25 |
| Rhubarb, cut in cubes, No. 2 | lb | 1 00 |
| Rhubarb, cut in fingers, No. 1 | lb | 1 50 |
| Rhubarb, cut in fingers, No. 2 | lb | 1 25 |
| Salep, powd | lb | 1 00 |
| Sarsaparilla, American | lb | 24 |
| Sarsaparilla, American, powd | lb | 30 |
| Sarsaparilla, Honduras. | lb | 65 |
| Sarsaparilla, Honduras, ground | lb | 70 |
| Sarsaparilla, Honduras, powd | lb | 70 |
| Sarsaparilla, Mexican | lb | 25 |
| Sarsaparilla, Mexican, ground | lb | 25 |
| Sarsaparilla, Mexican, powd | lb | 30 |
| Senega, pressed | lb | 80 |
| Senega, powd. | lb | 85 |
| Silkweed, pressed | lb | 28 |
| Skunk Cabbage, pressed | lb | 30 |
| Skunk Cabbage, powd | lb | 35 |
| Snake, Canada, pressed | lb | 50 |
| Snake, Virginia. | lb | 60 |
| Snake, Virginia, powd. | lb | 65 |
| Spikenard, pressed | lb | 72 |
| Spikenard, powd | lb | 30 |
| Squills, white, sliced. | lb | 20 |
| Squills, powd | lb | 60 |
| Stillingia, pressed | lb | 25 |
| Stillingia, powd | lb | 30 |
| Stone, pressed | lb | 21 |
| Sweet Flag, pressed | lb | 25 |
| Turkey Corn | lb | 28 |
| Unicorn, true, pressed | lb | 35 |
| Unicorn, true, powd | lb | 40 |
| Unicorn, false, pressed | lb | 40 |
| Unicorn, false, powd | lb | 45 |
| Valerian, English, bulk | lb | 35 |
| Valerian, English, powd | lb | 35 |
| Valerian, German | lb | 30 |
| Valerian, German, powd | lb | 30 |
| Yellow Dock | lb | 25 |
| Yellow Dock, ground | lb | 30 |
| Yellow Dock, powd | lb | 30 |
| Zedoary | lb | 30 |
| ROSIN, No. 1. | lb | 6-8 |
| Barrel. | | 7 75 |
| ROUGE, Jewelers' | lb | 50 |
| SACCHARIN | oz | 20 |
| SAFFRON, American | lb | 70 |
| Spanish. | oz | 80 |
| Spanish | lb | 10 00 |
| SAL, Acetosella | lb | 45 |
| Epsom | lb | 2½-5 |
| Glauber | lb | 1½-4 |
| Nitre | lb | 10-12 |
| Nitre, granulated. | lb | 10-12 |
| Nitre, powd. | lb | 10-12 |
| Prunelle | lb | 45 |
| Rochelle. | lb | 28-30 |
| Soda. | lb | 3-5 |
| Tartar. | lb | 15 |
| SALICINE, Merck's | oz | 37 |
| Salicine | lb | 4 60 |
| SALIPYRINE | oz | 1 00 |
| SALOL, Mallinckrodt's | oz | 15 |
| Salol, Mallinckrodt's, cartons | lb | 1 17 |
| Salol, Merck's | lb | 1 25 |
| Salol, Merck's | oz | 15 |
| SALOPHEN | oz | 1 00 |
| SANTONIN, bulk, M.C.W. | lb | 14 09 |
| Cryst., Merck's | oz | 99 |
| 1-oz vials, M.C.W. | oz | 99 |
| SEED, Angelica | lb | 25 |
| Anise, Italian | lb | 20 |
| Anise, Italian, powd | lb | 25 |
| Anise, Star | lb | 45 |
| Bird, mixed, bulk. | lb | 8 |
| Bird, mixed, boxes. | doz | 1 00 |
| Bird, mixed, cases, 30 pks | | 2 25 |
| Burdock | lb | 25 |
| Canary | lb | 9-10 |
| Carraway, Dutch. | lb | 15 |
| Carraway, powd. | lb | 17 |
| Cardamon, Malabar. | lb | 1 00 |
| Cardamon, Mangalor, bleached | lb | 1 25 |
| Cardamon, powd. | lb | 1 00 |
| Celery | lb | 25 |
| Colchicum. | lb | 50 |
| Colchicum, powd. | lb | 55 |
| Conium | lb | 25 |
| Coriander, German. | lb | 14 |
| Coriander, German, powd | lb | 20 |
| Cumin | lb | 18-20 |
| Dill | lb | 25 |
| Fennel. | lb | 18 |
| Fennel, powd. | lb | 20 |
| Flax, recleaned. | lb | 5½-6 |
| Flax, ground. | lb | 5½-6 |
| Flax Oil Cake | lb | 2½-3½ |
| Foenugreek, powd | lb | 12 |
| Hemp, recleaned | lb | 6½-8 |
| Henbane | lb | 35 |
| Larkspur. | lb | 55 |
| Lobelia | lb | 60 |
| Lobelia, powd. | lb | 65 |
| Millet, American. | lb | 6-8 |
| Mustard, black, Trieste | lb | 10-12 |
| Mustard, white | lb | 10-10 |
| Poppy Blue | lb | 16 |
| Pumpkin | lb | 22 |
| Rape, California. | lb | 6-8 |
| Sabadilla | lb | 35 |
| Sabadilla, powd | lb | 30-35 |
| Stavesacre | lb | 40 |
| Stavesacre, powd | lb | 45 |
| Stramonium | lb | 25 |
| Stramonium, powd | lb | 30 |
| Sunflower | lb | 15 |
| Watermelon | lb | 25 |
| Worm, American | lb | 25 |
| Worm, American, powd | lb | 25 |
| Worm, Levant | lb | 35 |
| Worm, Levant, powd | lb | 40 |
| SEIDLITZ MIXTURE | lb | 28-30 |
| SILVER, Bromide, 1-oz. vials, M. C. W. | oz | 1 19 |
| Chloride, 1-oz vials, M. C. W | oz | 84 |
| Cyanide, 1-oz vials, M. C. W | oz | 1 04 |
| Iodide, 1-oz vials, M. C. W | oz | 1 04 |
| Lactate, Merck's | oz | 1 04 |
| Nitrate, cryst., 1-oz vials, M.C.W. | oz | 57 |
| Nitrate, cones, 1-oz vials | oz | 70 |
| Nitrate, fused (Lunar caustic), 1-oz vials, M. C. W. | oz | 60 |
| Nitrate, fused, No. 2, 1-oz vials | lb | 47 |
| SNUFF, Garrett's, 1-oz tins | doz | 60 |
| Garrett's, 1⅔-oz tins. | doz | 1 10 |
| Garrett's, 3⅓-oz tins | doz | 1 75 |

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| | | |
|---|---|---|
| Garrett's, 6-oz bots | doz | 3 25 |
| Maccaboy, 3⅓-oz bots | doz | 2 00 |
| Rappee | lb | 65 |
| Rappee, 3⅓-oz bots | doz | 2 00 |
| Scotch, Lorillard's | lb | 65 |
| Scotch, Lorillard's | doz | 2 00 |
| Scotch, Garrett's Bladders | lb | 55 |
| SOAP, Castile, Conti's, white, box 14c less | lb | 17 |
| Castile, mottled, box 8½c; less | lb | 12 |
| Castile, Kirk's (San Bernaldo) white, 18 bars | per box | 3 00 |
| Castile, powdered, white | lb | 35 |
| Green, German | lb | 25 |
| Opodeldoc | lb | 20 |
| SODA, Ash. | lb | 2½-5 |
| Caustic, Sticks, Merck's | lb | 34 |
| Caustic, com., drums | lb | 3-4 |
| Caustic, com., 10-lb drums | lb | 6½-7½ |
| Caustic, purified, fused | lb | 40 |
| Sal (carbonate) bbls., 1¾c | lb | 3 |
| Soda Silicate, dry | lb | 35 |
| Soda Silicate, liquid | lb | 15-25 |
| SODIUM, 1-oz vials, M. C. W | oz | 25 |
| Acetate, M. C. W., carton | lb | 17 |
| Arseniate, 1-oz vials | oz | 9 |
| Arsenite, 1-oz vials, M. C. W | oz | 10 |
| Benzoate, 1-oz vials, M. C. W | oz | 11 |
| Benzoate, 1-lb bots. | lb | 56 |
| Benzoate, true fr. Gum Benzoin, Merck's | oz | 29 |
| Bicarbonate, C. P., powd., M. C. W | lb | 15 |
| Bicarbonate, kegs, 3c | lb | 4-5 |
| Bisulphite, dry, pure, Merck's | lb | 27 |
| Borate, neutral, Merck's | oz | 19 |
| Bromide, M. C. W. | lb | 35 |
| Cacodylate, Merck's | oz | 84 |
| Carbonate, pure cryst., 1-lb car., M. C. W | lb | 11 |
| Carbonate, pure gran., 1-lb car., M. C. W | lb | 11 |
| Carbonate, dried, C. P., 1-lb car | lb | 27 |
| Cinnamate | oz | 59 |
| Citrate, M. C. W | lb | 74 |
| Glycerophosphate, 75%, Merck's | oz | 24 |
| Glycocholate. | oz | 1 04 |
| Hypophosphite, purified, Merck's | lb | 1 14 |
| Hypophosphite, 1-oz vials, Merck's | oz | 15 |
| Hyposulphite, 112-lb kegs. | lb | 3 |
| Hyposulphite, less | lb | 5 |
| Iodide, 1-oz vials, M. C. W | oz | 31 |
| Iodide, H. P., Merck's | oz | 31 |
| Iodide, M. C. W | lb | 3 53 |
| Nitrate, cryst., C. P | lb | 29 |
| Nitrate, gran., pure, 1-lb cartons | lb | 18 |
| Phosphate, pure, recryst., bulk | lb | 12 |
| Phosphate, gran., pure, M. C. W | lb | 13 |
| Phosphate, dried, powd | lb | 24 |
| Salicylate, Merck's | lb | 49 |
| Santoninate, Merck's | oz | 89 |
| Succinate | oz | 49 |
| Sulphate, Glauber Salts | lb | 3-5 |
| Sulphate, Glauber Salts, bbl | lb | 1½ |
| Sulphate, dried | lb | 18-20 |
| Sulphite, crystals | lb | 10 |
| Sulphite, granulated | lb | 18 |
| Sulphite, dry, Merck's | lb | 22 |
| Tartrate, Merck's | lb | 64 |
| SOLUTIONS, Donovan's | lb | 34 |
| Fowler's | lb | 30 |
| Goulard's | lb | 35 |
| Nitrate, Iron | lb | 50 |
| Mercury, Nitrate | oz | 20 |
| Monsel's | lb | 50 |
| Tin, Chloride | lb | 35 |
| SOMATOSE, Biscuit, 8-oz boxes | doz | 4 00 |
| Somatose, Ferro, 2-oz tins | doz | 10 50 |
| Somatose, 2-oz tins | doz | 8 25 |
| Somatose, 1¼-lb tins | lb | 5 25 |
| Somatose, 1½-lb tins | lb | 5 00 |
| SOZOIODOL, Mercury, Merck's | oz | 1 15 |
| Potassium, Merck's | oz | 75 |
| Sodium, Merck's | oz | 80 |
| Zinc, Merck's | oz | 1 10 |
| SPARTEINE, Sulphate, Merck's, ⅛s | oz | 83 |
| Sulphate, 15-gr. vials | ea | 12 |
| SPERMACETI, in cakes. | lb | 40-45 |
| SPIRIT, Ammonia | lb | 75 |
| Ammonia, aromatic. | lb | 85 |
| Camphor | lb | 75 |
| Chloroform, U. S. P | lb | 75 |
| Lavender | lb | 60 |
| Nitre, U. S. P., 1-lb bots | lb | 65 |
| Nitre, U. S. P., 4-lb bots | lb | 58 |
| Nutmeg. | lb | 75 |
| Pimento. | lb | 65 |
| Rosemary. | lb | 65 |
| STEARIN | lb | 20 |
| STONE, Pumice, select | lb | 10 |
| Pumice, select, powd | lb | 8-10 |
| Rotten | lb | 12-15 |
| Rotten, powd | lb | 10 |
| Soap, cut | lb | 18 |
| Soap, powd | lb | 8 |
| STRONTIUM, Bromide, cryst., M. C. W. | oz | 11 |
| Carbonate, M. C. W | lb | 27 |
| Hypophosphite, M. C. W | oz | 29 |
| Iodide, 1-oz vial, M. C. W | oz | 30 |
| Lactate, Merck's | oz | 16 |
| Muriate, M. C. W | lb | 32 |
| Nitrate, pure, dried, Merck's | lb | 59 |
| Salicylate, M. C. W | lb | 83 |
| Sulphate, M. C. W | lb | 79 |
| STYPTICIN, Merck's | oz | 6 50 |
| STRYCHNINE, Acetate, ⅛-oz vials, M.C.W. | oz | 1 70 |
| Arsenate, ⅛-oz vials, M. C. W | oz | 1 70 |
| Bromide, ⅛-oz vials, M. C. W | oz | 1 70 |
| Citrate, ⅛-oz vials, M. C. W | oz | 1 70 |
| Crystals, ⅛-oz vials, M. C. W | oz | 1 45 |
| Hypophosphite, ⅛-oz vials, M. C. W | oz | 1 95 |
| Muriate, ⅛-oz vials, M. C. W | oz | 1 70 |
| Nitrate, ⅛-oz vials, M. C. W | oz | 1 70 |
| Phosphate, ⅛-oz vials, M. C. W | oz | 1 80 |
| Sulphate, ⅛-oz vials, M. C. W | oz | 1 40 |
| Sulphate, 1-oz vials, M. C. W | oz | 1 20 |
| Crystals, 1-oz vials | oz | 90 |
| Crystals, in bulk | oz | 85 |
| Powdered, in bulk | oz | 80 |
| Powdered, ⅛-oz vials | oz | 1 05 |
| Powdered, 1-oz vials | oz | 85 |
| STYRAX, liquid, | lb | 60 |
| SUGAR, burnt | lb | 25 |
| Grape. | lb | 25 |
| Milk, crystals | lb | 30 |
| Milk, powd., bulk | lb | 23 |
| Milk, powd., M.C.W., 1-lb cartons | lb | 25 |
| SULFONAL, 1-oz vials | oz | 1 35 |
| SULPHUR, California, ground, 110-lb bags | lb | 2 |
| Flowers | lb | 5 |
| Flour, Native. | lb | 2¾-3 |
| Flowers, in bags | lb | 2¾-3 |
| Flowers, Bergenport | lb | 3 |
| Iodide, Merck's | oz | 38 |

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| | | |
|---|---|---|
| Lac., precip | lb | 18 |
| Roll, bbl | lb | 2¾-5 |
| Sicily, ground. | lb | 5 |
| Strips | lb | 15 |
| Washed | lb | 15 |
| SUMAC. | lb | 10 |
| SYRUP, Ginger, U. S. P | lb | 65 |
| Hydriodic Acid | lb | 70 |
| Iron Iodide | lb | 65 |
| Ipecac | lb | 60 |
| Lactucarium | lb | 1 00 |
| Orange Peel | lb | 65 |
| Rhubarb | lb | 60 |
| Rhubarb, Aromatic | lb | 65 |
| Rhubarb and Potash | lb | 65 |
| Sarsaparilla | lb | 65 |
| Sarsaparilla, comp | lb | 65 |
| Senna | lb | 65 |
| Senega, U. S. P | lb | 65 |
| Simple | lb | 35 |
| Squill | lb | 60 |
| Squill, comp | lb | 60 |
| Stillingia, comp | lb | 60 |
| Tolu | lb | 60 |
| Wild Cherry | lb | 60 |
| Yerba Santa comp | lb | 65 |
| TALCUM, powdered | lb | 6-8 |
| Purified | lb | 25-30 |
| TAMARINDS, pound bottles | lb | 25 |
| Keg. | ea | 4 75 |
| Pulp | lb | 50 |
| TANNALBIN. | oz | 85 |
| TANNIN, 1-lb cartons, incl | lb | 85-90 |
| 1-oz cartons, incl | oz | 12 |
| TANNIGEN | oz | 75 |
| TANNOFORM, Merck's | oz | 22 |
| TANNOPINE | oz | 75 |
| Veterinary | oz | 25 |
| TAR, Barbadoes | lb. | 25 |
| Coal | gal | 25 |
| Pine, bulk | gal | 40 |
| Pine, ½-lb cans | doz | 75 |
| Pine, 1-lb cans | doz | 90 |
| Pine, 2-lb cans | doz | 1 50 |
| Pine, gal cans | doz | 6 00 |
| TARTAR EMETIC, M. C. W | lb | 54 |
| TEREBENE, 1-lb bottles. | lb | 79 |
| Merck's | oz | 14 |
| TERPIN HYDRATE, cryst., Merck's | oz | 10 |
| Pounds, Merck's | lb | 60 |
| TERPINOL, Liquid, Merck's | oz | 47 |
| THEOBROMINE, Alkaloid, Merck's | oz | 90 |
| And Sodium Salicylate, Merck's | oz | 60 |
| THIOL, dry | oz | 1 00 |
| Liquid. | oz | 40 |
| THYMOL, 1-oz vials, Merck's | oz | 25 |
| Pounds | lb | 2 90 |
| THYROIDIN, Merck's | oz | 1 30 |
| TIN, Chloride, Merck's | lb | 53 |
| Metallic, feathered | lb | 1 00 |
| Muriate, solution | lb | 35 |
| Oxide, white, pure, Merck's | lb | 99 |
| TINCTURE, Aconite Leaves | lb | 65 |
| Aconite Root | lb | 75 |
| Aconite Root, Fleming's | lb | 90 |
| Aloes | lb | 65 |
| Aloes and Myrrh | lb | 65 |
| Arnica | lb | 65 |
| Asafœtida | lb | 65 |
| Belladonna | lb | 65 |

| | | |
|---|---|---|
| Benzoin | lb | 75 |
| Benzoin, comp | lb | 75 |
| Blood Root | lb | 65 |
| Buchu | lb | 65 |
| Cantharides | lb | 75 |
| Capsicum | lb | 65 |
| Cardamom | lb | 75 |
| Cardamom, comp | lb | 75 |
| Catechu, comp | lb | 75 |
| Cinchona, comp | lb | 75 |
| Cinnamon | lb | 65 |
| Colchicum Root | lb | 75 |
| Colchicum Seed | lb | 75 |
| Columbo | lb | 60 |
| Conium | lb | 65 |
| Cubebs | lb | 65 |
| Digitalis | lb | 65 |
| Ergot | lb | 75 |
| Ergot, ethereal | lb | 80 |
| Galls | lb | 60 |
| Gelsemium | lb | 75 |
| Gentian | lb | 60 |
| Gentian, comp | lb | 65 |
| Ginger | lb | 65 |
| Guaiac | lb | 75 |
| Guaiac, ammoniated | lb | 75 |
| Guaiac, Dewees' | lb | 75 |
| Hyoscyamus | lb | 65 |
| Iodine. | lb | 1 40 |
| Iodine, colorless. | lb | 1 40 |
| Iodine, comp. | lb | 1 40 |
| Iodine, Churchill's. | lb | 1 75 |
| Ipecac | lb | 80 |
| Iron Acetate | lb | 65 |
| Iron Chloride | lb | 50 |
| Iron Citro-Chloride | lb | 65 |
| Jalap | lb | 65 |
| Kino | lb | 75 |
| Lobelia | lb | 60 |
| Lobelia, ethereal | lb | 65 |
| Myrrh | lb | 75 |
| Myrrh and Capsicum | lb | 75 |
| Nux Vomica | lb | 65 |
| Opium | lb | 1 25 |
| Opium, camphorated | lb | 60 |
| Opium, deodorized | lb | 1 30 |
| Orange Peel | lb | 65 |
| Quassia | lb | 60 |
| Rhatany | lb | 60 |
| Red Saunders | lb | 65 |
| Rhubarb | lb | 65 |
| Rhubarb, Aqueous | lb | 60 |
| Rhubarb, Aromatic | lb | 70 |
| Rhubarb, comp | lb | 65 |
| Rhubarb, Sweet | lb | 65 |
| Rhubarb and Aloes | lb | 65 |
| Rhubarb and Senna | lb | 65 |
| Senna | lb | 65 |
| Senna, comp | lb | 65 |
| Serpentaria | lb | 65 |
| Stramonium Leaves | lb | 65 |
| Stramonium Seed | lb | 65 |
| Strophanthus | lb | 1 25 |
| Tolu | lb | 75 |
| Valerian | lb | 65 |
| Valerian, ammoniated | lb | 85 |
| Veratrum Viride | lb | 65 |
| Warburg's | lb | 1 75 |
| TRIKRESOL, S. & G. | lb | 60 |
| TRIMETHYLAMINE, Merck's | oz | 55 |

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| | | |
|---|---|---|
| TRIONAL | oz | 1 50 |
| TRIPOLI, bulk | lb | 8-12 |
| TURPENTINE | gal | 1 00 |
| In case | gal | 97 |
| Chian | oz | 45 |
| Venice | lb | 35 |
| URANIUM, Acetate, 1-oz vials, Merck's | oz | 59 |
| Chloride, 1-oz vials, Merck's | oz | 47 |
| Nitrate, 1-oz vials, Merck's | oz | 45 |
| Sulphate, 1-oz vials, Merck's | oz | 47 |
| UROTROPIN | oz | 60 |
| Tablets, 20 in box | box | 25 |
| UNGUENTUM CREDE, ½-oz jars | oz | 90 |
| URETHANE, Merck's | oz | 54 |
| VANILLIN, 1-oz vials | oz | 75 |
| VERATRINE, pure, ⅛-oz vials | oz | 2 40 |
| VERONAL, powd | oz | 1 60 |
| Tablets, 10c. | ea | 30 |
| Tablets, 100s | ea | 2 25 |
| VERDIGRIS | lb | 40 |
| Powdered | lb | 45 |
| WATER, Cherry, Laurel | pt | 50 |
| Chlorine | lb | 40 |
| Distilled | gal | 8 |
| Elder Flower | lb | 50 |
| Orange Flower, triple | lb | 35 |
| Orange Flower | gal | 2 00 |
| Orange Flower, Chiris, small | doz | 2 00 |
| Orange Flower, Chiris, large | doz | 3 75 |
| Rose, triple | lb | 40 |
| Rose | gal | 2 00 |
| Rose, Chiris, 6¾-gal coppers | gal | 1 75 |
| Rose, Chiris, small | doz | 2 00 |
| Rose, Chiris, large | doz | 4 00 |
| WAX, Bayberry | lb | 45 |
| Bees, yellow, refined | lb | 37-40 |
| Bees, yellow, oz. | lb | 45 |
| Bees, white, extra | lb | 60 |
| Bees, white, No. 1 | lb | 55 |
| Bowdlear's, 1-lb cartons | doz | 4 80 |
| Fruit, can, red | lb | 8 |
| Fruit, can, white | lb | 8 |
| Japan | lb | 18-20 |
| WAX, FLOOR | lb | 25-33 |
| Johnson's, 1-lb cartons | doz | 4 00 |
| Johnson's, ½-lb cartons | doz | 2 25 |
| Johnson's, ¼-lb cartons | doz | 1 40 |
| WHITING, Gilders' | lb | 3 |
| Spanish | lb | 2½ |
| WINE, Antimony | lb | 65 |
| Aromatic | lb | 65 |
| Colchicum Root | lb | 75 |
| Colchicum Seed | lb | 65 |
| Ergot | lb | 1 25 |
| Ipecac | lb | 1 25 |
| WOOD, Brazil, ground | lb | 10 |
| Camwood | lb | 10 |
| Fustic, cut | lb | 3½-5 |
| Fustic, ground | lb | 6 |
| Guaiac, rasped | lb | 10 |
| Hypernic | lb | 8-10 |
| Logwood, chip | lb | 8-10 |
| Logwood, ground | lb | 8-10 |
| Nic. | lb | 8-10 |
| Quassia, chip | lb | 15 |
| Quassia, ground | lb | 18 |
| Quassia, powdered | lb | 18 |
| Red Sanders, ground | lb | 12 |
| Red, cut | lb | 10 |
| XANTHOXYLIN, Keith's | oz | 1 13 |
| XYLOL | lb | 70 |
| ZINC, Acetate, Merck's | lb | 43 |
| Acetate, 1-lb bottles, M. C. W | lb | 43 |
| Benzoate, Merck's | oz | 24 |
| Benzoate, 1-oz vials, M. C. W | oz | 24 |
| Carbolate, 1-oz vials, M. C. W | oz | 24 |
| Carbonate, precipitate, 1-lb cartons | lb | 25 |
| Chloride, fused, 1-oz vials, Merck's | oz | 13 |
| Chloride, granulated, Merck's | lb | 33 |
| Cyanide, 1-oz vials, M. C. W | oz | 21 |
| Hypophosphite, 1-oz vials, Merck's | oz | 29 |
| Iodide, 1-oz vials, M. C. W | oz | 37 |
| Metallic, pure, feathered | lb | 27 |
| Oxide, English, Hubbuck's | lb | 50 |
| Oxide, pure, M.C.W. | lb | 30 |
| Permanganate, Merck's | oz | 52 |
| Phosphate, M. C. W | oz | 10 |
| Phosphide, Merck's | oz | 23 |
| Sulphate, cryst | lb | 8-10 |
| Sulphate, cryst., chemically pure | lb | 18 |
| Sulphide, 1-oz vials, M. C. W | oz | 16 |
| Sulphocarbolate, M. C. W | lb | 59 |
| Sulphocarbolate, 1-oz vials, M. C. W | oz | 11 |
| Sulphate, H. P., Merck's | lb | 15 |
| Sulphate, dried, H. P., Merck's | lb | 25 |
| Sulphocarbolate, Merck's | oz | 11 |

## MINERAL WATERS.

| | Case | Dozen |
|---|---|---|
| Apenta Bitter Water, 50 bots in case | $10 00 | $2 65 |
| Apollinaris, 50 qt bots in case | 8 50 | 2 25 |
| Apollinaris, pints | 12 00 | 1 60 |
| Buffalo Lithia, 12 ½-gal. bots in case | 6 00 | .... |
| Bartlett, 50 qt. bots. in case | 8 00 | 2 25 |
| Bethesda, 50 qt. bots. in case | 7 50 | 2 25 |
| Bethesda, 12 ½-gal. bots. in case | 5 50 | .... |
| Bythinia Water | 10 00 | 2 50 |
| Carlsbad, Sprudel, 30 qt. bots. in case | 11 00 | 4 50 |
| Carlsbad, Muhlbrun, 50 qt. bots. in case | 18 00 | 4 75 |
| Congress (Saratoga), 48 bots. in case | 8 00 | 2 50 |
| Franz Joseph, 50 bots. in case | 11 00 | 3 00 |
| Garrod Spa Lithia, pints | 6 00 | 2 00 |
| Garrod Spa, Lithia, ½-gal | ..... | 5 00 |
| Hathorn, 48 pt. bots. in case | 8 00 | 2 50 |
| Hunyadi Janos (in case), 50 qt. bots | 11 00 | 3 00 |
| Hunyadi Matyas, 50 qt. bots. in case | 9 00 | 2 50 |
| Londonderry Lithia, 50 qt. bots. in case | 10 00 | 2 50 |
| Londonderry Lithia, ½ gallons | 9 50 | 6 50 |
| Londonderry Lithia, 100 pints | 13 50 | 1 75 |
| Poland, qts., 50 to case | 9 00 | 2 50 |
| Rackoczy Kissengen | ..... | 5 00 |
| Red Raven Splits | 5 00 | 1 35 |
| Rubinat Condal, 50 pt. bots. in case | 14 00 | 3 75 |
| Veronica | ..... | 5 50 |
| Vichy Water Celestine | 10 00 | 3 00 |
| Risk of breakage is assumed by buyer. | | |
| Villacabras Water, qts., 50 bots. in case | 17 50 | 4 50 |
| Witter, 36 bots in case | 12 00 | 4 50 |
| White Rock Splits | 9 90 | 1 20 |
| White Rock, pints | 11 50 | 1 50 |
| White Rock, quarts | 8 85 | 2 25 |

(Cash discount 5% on case prices White Rock.)

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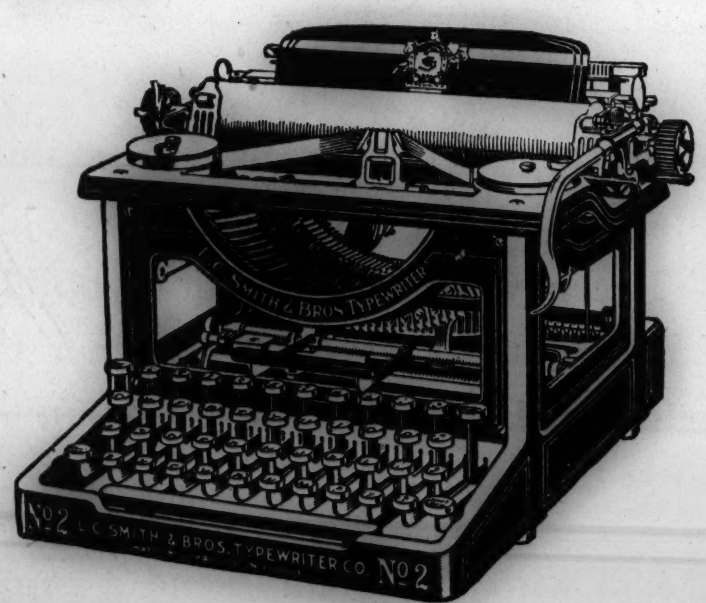
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The fees in this department are: Matriculation, $5.00; Lecture Fees, each year, $90.00; Graduation Fee, $25.00.

This school has been registered as **Class A by the Regents of the University of New York.**

Two degrees are conferred: First, the Degree of Pharmaceutical Chemist, after two full courses of lectures and the meeting of all requirements as to fees and examinations; second, Doctor of Pharmacy, after two full courses of lectures subsequent tc three years' practical experience in Pharmacy.

For announcements and further information, address

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